Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0013	Overall LMA	Total LMA Miles						
Sutter Maintenance Yard Maintenance Area 0013	Rating							
Area 0013	A	41.03			T		Design 8	& System
Rated Item			nce Deficiency			cement	Obsole	scence
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee Vegetation	l				0.13			
Trim / Thin Trees	0.36		0.36	0.88%	00			
Encroachments	0.02		0.02	0.05%	11.86	0.25		
Animal Control	0.04		0.04	0.10%		0.20		
Slope Stability	0.02		0.02	0.05%				
Erosion / Bank Caving	0.02		0.02	0.05%				
Supplemental								
DWR UCIP Field Study					0.23	0.05		
DWR UCIP LMA Responsibility								
LMA Totals:	0.46	0.00	0.46	1.12%	12.22	0.30	0.00	0.00
Unit No. 01 Cherokee Canal RB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	18.19						
		Maintena	nce Deficiency		Enforcement		Design & Obsole	k System
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	
Earthen Levee						1		
Vegetation					0.07			
Trim / Thin Trees	0.04		0.04	0.22%				
Encroachments					3.11			
Slope Stability	0.01		0.01	0.06%				
Erosion / Bank Caving	0.01		0.01	0.06%				
Supplemental	I	I	I		0.40	0.00	T	
DWR UCIP Field Study					0.10	0.02		
DWR UCIP LMA Responsibility	0.00	0.00	0.00	0.000/	0.00	0.00	0.00	0.00
Unit Totals:	0.06	0.00	0.06	0.33%	3.28	0.02	0.00	0.00
Unit No. 02 Cherokee Canal LB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	22.84						
Detection		Maintena	nce Deficiency		Enforc	cement	Design 8 Obsole	k System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation					0.06			
Trim / Thin Trees	0.32		0.32	1.40%				
Encroachments	0.02		0.02	0.09%	8.75	0.25		
Animal Control	0.04		0.04	0.18%				
Slope Stability	0.01		0.01	0.04%				
Erosion / Bank Caving	0.01		0.01	0.04%				
Supplemental DWP LICIP Field Study	1		1		0.12	0.02		
DWR UCIP Field Study DWR UCIP LMA Responsibility					0.13	0.03		
Unit Totals:	0.40	0.00	0.40	1.75%	8.94	0.28	0.00	0.00
Unit Totals:	0.40	0.00	0.40	1./5%	0.94	0.20	0.00	0.00

Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Fall 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Spring

Summer **

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)			A	
•	** Non-receipt of Summ Reports may effect or			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated				ual maintenance
FALL INSPECTIONS: The overall maintena within the attached ur			tion and maintenance de ended to be an indiction o	
Comments				

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 01 Cherokee Canal	Right	18.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/17/2018 - 4/17/2018		10/31/2018 - 10/31/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Shawn Freitag Sutter Maintenance Yard		Shawn Freitag Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

	1	D 11 44						
LM Start		Rating **	Α	Issue No.		1		
LM End		Issue Type +	Ma	Location *				
Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item		s & Maintena	nce		0		0	
item	Manuals						0	
DWR ID DWR_MA0013_01_s _ 2013_1								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
The LMA h	The LMA has the O&M manuals.							

No Photos

LM Start		Rating **	Α	Issue No.		8
LM End		Issue Type +	Ma	Location *		
Catagory	Earthen L	evee		GPS L	atitud	le/Longitude
Calegory	Category		Start		End	
Item	Emergency Supplies &			0		
пеш	Equipmer	nt			0	
DWR ID	DWR_MA0	013_01_s _ 201	13_8			
		Comn	nent Cod	de		

No Photos

Inspector Comment The LMA has adequate flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ма	Location *			
Category	Catagory Earthen Levee		GPS La	atituc	le/Longitude		
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_MA0	013_01_s _ 201	3_16				
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
The LMA o	The LMA completed flood fight training in 2018.						

No Photos

* Location LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.		90	
LM End	0.27	Issue Type +	En	Location *			
Catagony	Category				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UCI	P Field Study	39.5930	94°	39.593094°		
пеш			-121.7035	70°	-121.703570°		
DWR ID	16327					·	

Inspector Comment

Comment Code

FS_ID:53313 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; crossing remains Urgent because levee erosion on both WS and LS still present (D. Sanoski - DWR UCIP).6/14/2017 LS slope still dug away from around the pipe. Appears no repairs have been made to the pipe yet. (DWR Sutter Yard- AFreitag)11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.

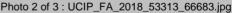
FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 8/23/2018 1:29:00 PM

LM Start	0.27	Rating **	U	Issue No.	90 (cont)
LM End	0.27	Issue Type +	En	Location *	



Overview of the crossing.





Air Vent located on WS.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.		90 (cont)	
LM End	0.27	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	DWR UCIP Field Study			4 °	39.593094°	
пеш				-121.70357	0 °	-121.703570°	
DWR ID	16327						

Comment Code

Inspector Comment

FS_ID:53313 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; crossing remains Urgent because levee erosion on both WS and LS still present (D. Sanoski - DWR UCIP).6/14/2017 LS slope still dug away from around the pipe. Appears no repairs have been made to the pipe yet. (DWR Sutter Yard- AFreitag)11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.

FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 8/23/2018 1:29:00 PM



Air vent and gate located in channel. Unable to determine if part of crossing.

LM Start	0.46	Rating **	М	Issue No.		89		
LM End	0.46	Issue Type +	En	Location *		LS		
Catagory Earthen Levee				GPS Latitude/Longitude				
Category						End		
Item	Encroach	ments		39.5911	62 °	39.591162		
пеш				-121.701820°		-121.701820		
DWR ID	DWR ID DWR_MA0013_01_s _ 2017_89							
	Comment Code							

PR: Prunings

Inspector Comment

Remove the prunings from the landside slope.

Photo 1 of 1: FA_2018_MA0013_300_89_20180905_00012.jpg



View of prunings along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not /	Applicable A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.50	Rating **	М	Issue No.		91	
LM End	0.50	Issue Type +	En	Location *			
Catagory	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5909	68°	39.590968°	
пеш					40°	-121.701240 °	
DWR ID	16342						

Inspector Comment

Comment Code

FS_ID:52179 DS_ID:16342 EP_NO: 12129

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/16/2016 Abandoned. WS end still has plate bolted on. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing still has plate bolted on it at the WS end and LS end was mostly buried.7/14/2015 WS pipe end still had plate bolted on it.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/10/2013 Same as last inspection.4/12/2012 WS pipe daylight has bolted plate.

FIÉLD STRUCT DESC: *ABANDONED* 6-inch steel irrigation pipe through the levee, 2.4 feet below the crown. Steel plate bolted on the waterside (WS) end. (Permit No. 12129, 12129A, 1977 - John & Jerie Malina) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/16/2017 10:08:54 AM

LM Start	0.50	Rating **	М	Issue No.	91 (cont)
LM End	0.50	Issue Type +	En	Location *	



View of levee crown at crossing looking downstream at right bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52179_66684.jpg



WS-Bolted plate

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.50	Rating **	М	Issue No.		91 (cont)		
LM End	0.50	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCIP Field Study			39.5909	88°	39.590968°		
пеш				-121.7012	40 °	-121.701240°		
DWR ID	16342							

Inspector Comment

Comment Code

FS_ID:52179 DS_ID:16342 EP_NO: 12129

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/16/2016 Abandoned. WS end still has plate bolted on. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing still has plate bolted on it at the WS end and LS end was mostly buried.7/14/2015 WS pipe end still had plate bolted on it.5/21/2014 Same as last inspection.12/2/2013 Same as last

inspection.7/10/2013 Same as last inspection.4/12/2012 WS pipe

daylight has bolted plate.

FIÉLĎ_STRUCT_DESC: *ABANDONED* 6-inch steel irrigation pipe through the levee, 2.4 feet below the crown. Steel plate bolted on the waterside (WS) end. (Permit No. 12129, 12129A, 1977 - John & Jerie Malina) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 10:08:54 AM

Photo 3 of 3 : UCIP_FA	A_2018_52179_66685.jpg
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LS-Outlet

	LM Start	0.63	Rating **	М	Issue No.		46			
	LM End	0.63	Issue Type +	En	Location *	LS				
	Category Earthen Levee			GPS La	atitud	le/Longitude				
	Category				Start		End			
	ltem Encroachments			39.589337°		39.589337	0			
					-121.700604°		04° -121.700604°			
	DWR ID DWR_MA0013_01_f _ 2016_46									
	Comment Code									
	PR : Prunings									
	Inspector Comment									

No Photos

Remove the prunings from the landside toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

0.63	Rating **	M	Issue No.		14			
1.17	Issue Type +	En	Location *		LS			
Earthen L	evee		GPS La	atitud	le/Longitude			
					End			
Encroachments				72°	39.581472°			
Item			-121.700599°		-121.700518°			
DWR ID DWR_MA0013_01_s _ 2012_14								
Comment Code								
Inspector Comment								
	1.17 Earthen L	1.17 Issue Type + Earthen Levee Encroachments DWR_MA0013_01_s _ 201 Comn	1.17 Issue Type + En Earthen Levee Encroachments DWR_MA0013_01_s _ 2012_14 Comment Coc	1.17 Issue Type + En Location * Earthen Levee GPS La Start Encroachments 39.5892 -121.7005 DWR_MA0013_01_s _ 2012_14 Comment Code	1.17 Issue Type + En Location * Earthen Levee			

No Photos

LM Start	0.73	Rating **	М	Issue No.		12
LM End	0.76	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory			St			End
ltom	Encroachments		39.5879	05°	39.587505°	
пеш	Item			-121.7008	22 °	-121.700880°
DWR ID	DWR_MA0	013_01_s _ 201	12_12			

Comment Code

EQ: Equipment

Inspector Comment

Remove the equipment from the landside toe.

Photo 1 of 1: FA_2018_MA0013_300_12_20180905_00004.jpg



View of the equipment along the landside toe of the levee.

LM Start	0.83	Rating **	М	Issue No.		61	
LM End	0.83	Issue Type +	En	Location *	LS		
Category	Earthen L	evee	GPS La	GPS Latitude/Longitude			
Calegory				Start Er		End	
Item	Encroach	ments		39.5864	17°	39.586417°	
item				-121.7005	85 °	-121.700585 °	
DWR ID DWR_MA0013_01_f _ 2018_61							
	Comment Code						

PR: Prunings

CR : Crown

Inspector Comment

Remove the prunings from the landside slope.

Photo 1 of 1: FA_2018_MA0013_300_61_20181102_00142.jpg



View of the prunings along the landside slope.

* Location LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

U : Unacceptable

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.		92
LM End	1.13	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.58214	17°	39.582147°
пеш				-121.70054	10°	-121.700540 °
DWR ID	16343					

Inspector Comment

Comment Code

FS ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

LM Start	1.13	Rating **	A/W	Issue No.	92 (cont)
LM End	1.13	Issue Type +	Ма	Location *	





Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52180_66688.jpg



View of WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.		92 (cont)
LM End	1.13	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.58214	7°	39.582147°
пеш			-121.70054	o o	-121.700540°	
DWR ID	16343					

Inspector Comment

Comment Code

FS_ID:52180 DS_ID:16343 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 1.15)] FS Date: 6/16/2017 10:11:43 AM

Photo 3 of 3: UCIP_FA_2018_52180_66687.jpg



View of WS with pipe in channel.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93	
LM End	1.59	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start	End		
Item	DWR UCI	P LMA Respo	nsibility	39.5768	83°	39.576883°	
пеш				-121.7027	70°	-121.702770 °	
DWR ID	16831						
	Comment Code						

Inspector Comment

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 8/23/2018 1:54:26 PM



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93 (cont)	
LM End	1.59	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start	End		
Item	DWR UC	IP LMA Respo	nsibility	39.5768	83 °	39.576883°	
пеш				-121.7027	70°	-121.702770 °	
DWR ID	16831						
	Comment Code						

Inspector Comment

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 8/23/2018 1:54:26 PM



Corrugated metal riser with slide gate located on WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.59	Rating **	М	Issue No.		93 (cont)
LM End	1.59	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.57688	3°	39.576883°
пеш				-121.70277	o°	-121.702770 °
DWR ID	16831					

Inspector Comment

Comment Code

FS_ID:52938 DS_ID:16831 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag) 10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 8/23/2018 1:54:26 PM



WS headwall, rock protection, and outlet blocked by shrub.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		94	
LM End	1.66	Issue Type +	En	Location *			
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.5758	16°	39.575816°	
пеш				-121.7029	00°	-121.702900 °	
DWR ID	16345						

Inspector Comment

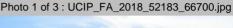
Comment Code

FS ID:52183 DS_ID:16345 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 PVC pipe still present blocking screw gate. LS inlet of the 24" cmp pipe is about 75% blocked by sediment. (DWR Sutter Yard- AFreitag)11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard- AFreitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 6/16/2017 12:21:04 PM

LM Start	1.66	Rating **	М	Issue No.	94 (cont)
LM End	1.66	Issue Type +	En	Location *	





Overview of levee at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52183_66704.jpg



WS view looking upstream.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.66	Rating **	М	Issue No.		94 (cont)
LM End	1.66	Issue Type +	En	Location *		
Category	Supplemental GPS				titud	e/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		39.5758	16°	39.575816°
пеш				-121.70290	00°	-121.702900°
DWR ID	16345					·

Inspector Comment

Comment Code

FS_ID:52183 DS_ID:16345 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 PVC pipe still present blocking screw gate. LS inlet of the 24" cmp pipe is about 75% blocked by sediment. (DWR Sutter Yard- AFreitag)11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard- AFreitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 6/16/2017 12:21:04 PM



Positive closure device on WS slope, panel lid fell in.

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		95
LM End	2.31	Issue Type +	En	Location *		
Category	Supplemental			GPS La	atitud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5664	33 °	39.566433°
пеш				-121.7037	50°	-121.703750°
DWR ID	16346					

Inspector Comment

Comment Code

FS_ID:52184 DS_ID:16346 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no LS inlet visible- trace with locator/GPR to try and locate. Wooden debris down inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard-AFreitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)]

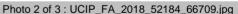
FS Date: 6/16/2017 12:24:07 PM



Photo 1 of 3: UCIP_FA_2018_52184_66708.jpg



Overview of crossing looking DS.





Corrugated riser located on WS slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.31	Rating **	М	Issue No.		95 (cont)
LM End	2.31	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	e/Longitude	
Calegory						End
Item	DWR UCI	P Field Study		39.56643	3°	39.566433
пеш				-121.70375	0 °	-121.703750
DWR ID	16346					

Inspector Comment

Comment Code

FS_ID:52184 DS_ID:16346 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Still no LS inlet visible- trace with locator/GPR to try and locate. Wooden debris down inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard-AFreitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)]

FS Date: 6/16/2017 12:24:07 PM



Corrugated metal riser on WS slope. Lid panel blocking gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.		96	
LM End	2.70	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.56113	0 °	39.561130°	
пеш				-121.70514	0 °	-121.705140°	
DWR ID	16347						

Inspector Comment

Comment Code

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

LM Start	2.70	Rating **	A/W	Issue No.	96 (cont)
LM End	2.70	Issue Type +	Ma	Location *	



Overview of levee crown looking downstream at crossing.

Photo 2 of 3: UCIP_FA_2018_52185_66714.jpg



Flap gate at WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.		96 (cont)
LM End	2.70	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longit		
Calegory		Start		Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.56113	0°	39.561130°
пеш			-121.70514	o°	-121.705140°	
DWR ID	16347					·

Inspector Comment

Comment Code

FS_ID:52185 DS_ID:16347 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 2.74)] FS Date: 6/16/2017 12:27:02 PM



View of channel.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97
LM End	3.05	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Category		Star		Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5563	10°	39.556310°
пеш				-121.70647	70°	-121.706470°
DWR ID	17372					

Inspector Comment

Comment Code

FS_ID:52186 DS_ID:17372 EP_NO: N/A

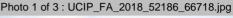
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM





Overview of levee crown looking downstream at crossing.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		Issue No.		Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ma	Location *						
Category				GPS Latitude/Longitude						
Calegory		''		Start		End				
Item	DWR UCI	P LMA Respo	onsibility	39.55631	10°	39.556310°				
item				-121.70647	70°	-121.706470°				
DWR ID	17372									

Inspector Comment

Comment Code

FS ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM





WS levee slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Latitude/		e/Longitude
Calegory			Star			End
Item	DWR UCI	P LMA Respo	onsibility	39.5563	10°	39.556310°
ILEIII				-121.70647	70°	-121.706470°
DWR ID	17372					

Inspector Comment

Comment Code

FS_ID:52186 DS_ID:17372 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM



Flap gate on waterside.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.05	Rating **	М	Issue No.		98	
LM End	3.05	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.55627	'6	39.556276	0
пеш				-121.70651	0 °	-121.706510	0
DWR ID	16348						

Comment Code

Inspector Comment

FS_ID:52187 DS_ID:16348 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/14/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/16/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/28/2016 Unable to locate.7/14/2015 Unable to locate.5/21/2014 Same as last inspection.12/2/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Crossing not visible during the Spring 2012

Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation.

FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee at an unknown depth below the crown. Concrete headwall on both waterside (WS) and landside (LS) ends. Flap gate located on the WS end.

[Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/16/2017 12:30:01 PM

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		99
LM End	3.24	Issue Type +	Ma	Location *		
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	39.5534	90°	39.553490°	
пеш				-121.7066	80°	-121.706680 °
DWR ID	16349					

Comment Code Inspector Comment

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

LM Start	3.24	Rating **	М	Issue No.	99 (cont)
LM End	3.24	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52188_66725.jpg



Overview of levee crown looking DS at crossing.



Flap gate on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.24	Rating **	М	Issue No.		99 (cont)	
LM End	3.24	Issue Type +	Ma	Location *			
Category	Supplemental			Supplemental GPS Latitude/Lo			le/Longitude
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.55349	00°	39.553490°	
item			-121.70668	80°	-121.706680°		
DWR ID	16349				·		

Inspector Comment

Comment Code

FS_ID:52188 DS_ID:16349 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

Photo 3 of 3: UCIP_FA_2018_52188_66726.jpg



Recent sediment removal on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100		
LM End	3.27	Issue Type +	Ma	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory	ory		Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.55312	29°	39.553129°		
item			-121.7066	40 °	-121.706640 °			
DWR ID	16350							

Inspector Comment

Comment Code

FS_ID:52189 DS_ID:16350 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)] FS Date: 6/16/2017 12:32:19 PM

 LM Start
 3.27
 Rating **
 A/W
 Issue No.
 100 (cont)

 LM End
 3.27
 Issue Type +
 Ma
 Location *



Overview of levee crown at crossing.

Photo 2 of 3: UCIP_FA_2018_52189_66730.jpg



View of WS flap gate.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.		100 (cont)
LM End	3.27	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitu		
Calegory	ry		Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.55312	29°	39.553129°
пеш				-121.70664	10°	-121.706640°
DWR ID	16350					

Inspector Comment

Comment Code

FS_ID:52189 DS_ID:16350 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)]

FS Date: 6/16/2017 12:32:19 PM

Photo 3 of 3: UCIP_FA_2018_52189_66732.jpg



Sedimentation cleared on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No.		101
LM End	3.72	Issue Type +	Ma	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P LMA Respo	39.5465	92°	39.546592 °	
пеш				-121.7075	60°	-121.707560 °
DWR ID	16351					

Inspector Comment

Comment Code

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

LM Start	3.72	Rating **	A/W	Issue No.	101 (cont)
LM End	3.72	Issue Type +	Ма	Location *	



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52190_66738.jpg



WS slope covered by dense vegetation.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No. 10		Issue No.		101 (cont)
LM End	3.72	Issue Type +	Ма	Location *				
Category Supplemental			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UCI	DWR UCIP LMA Responsibility			92 °	39.546592°		
пеш				-121.70756	60°	-121.707560°		
DWR ID	16351							

Inspector Comment

Comment Code

FS_ID:52190 DS_ID:16351 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

Photo 3 of 3 : UCIP_FA_2018_52190_66735.jpg

WS flap gate

LM Start	3.73	Rating **	M	Issue No.		51	
LM End	3.73	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroachments			39.5464	65°	39.546465 °	
item				-121.7075	30°	-121.707530 °	
DWR ID	DWR_MA0	013_01_s _ 201	6_51				

Comment Code

EQ: Equipment

Inspector Comment

Remove ag equipment from the toe of slope.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.74	Rating **	М	Issue No.		102
LM End	3.74	Issue Type +	Ма	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCIP LMA Responsibility			39.5463	17°	39.546317°
item			-121.7075	10°	-121.707510°	
DWR ID	16365					

Inspector Comment

Comment Code

FS_ID:52191 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

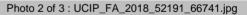
UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM

LM Start	3.74	Rating **	М	Issue No.	102 (cont)
LM End	3.74	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.





WS flap gate blocked by debris.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.74	Rating **	М	Issue No.		102 (cont)
LM End	3.74	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	DWR UCIP LMA Responsibility			17°	39.546317°
item			-121.7075	10°	-121.707510°	
DWR ID	16365					·

Comment Code

Inspector Comment

FS_ID:52191 DS_ID:16365 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM



LS slide gate covered with silt. Slide gate is bent.

LM Start	4.06	Rating **	М	Issue No.		18		
LM End	4.13	Issue Type +	En	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory	Calegory			Start		End		
Item	Vegetation			39.5416	60°	39.540651 °		
пеш			-121.707408°		-121.707404°			
DWR ID DWR_MA0013_01_s _ 2013_18								
	Comment Code							

V6: Landscaping

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_300_18_20180905_00005.jpg



View of the redwood trees along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103	
LM End	4.35	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCIP LMA Responsibility				16°	39.537516°	
пеш				-121.7075	30°	-121.707580°	
DWR ID	16341						

Inspector Comment

Comment Code

FS ID:52193 DS_ID:16341 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

LM Start	4.35	Rating **	A/W	Issue No.	103 (cont)
LM End	4.35	Issue Type +	Ma	Location *	





Overview of levee crown at crossing looking upstream.

Photo 2 of 3: UCIP_FA_2018_52193_66753.jpg



View of WS slope and toe.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.35	Rating **	A/W	Issue No.		103 (cont)	
LM End	4.35	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.5375	16°	39.537516°	
item				-121.707580°		-121.707580°	
DWR ID 16341							

Inspector Comment

Comment Code

FS ID:52193 DS_ID:16341 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM





View of WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.		104		
LM End	4.85	Issue Type +	Ма	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP LMA Responsibility				0°	39.530220°		
пеш				-121.70794	0°	-121.707940°		
DWR ID	16355							

Inspector Comment

Comment Code

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)] FS Date: 6/16/2017 12:55:37 PM





Overview of levee crown at crossing looking downstream at righ bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52194_66758.jpg



Burrow activity on WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.	104 (cont)			
LM End	4.85	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.53022	0°	39.530220 °		
пеш				-121.70794	0°	-121.707940°		
DWR ID	16355							

Comment Code

Inspector Comment

FS_ID:52194 DS_ID:16355 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]

FS Date: 6/16/2017 12:55:37 PM



View of WS flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105
LM End	5.33	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52323	6°	39.523236°
пеш				-121.70765	0°	-121.707650 °
DWR ID	16356					

Inspector Comment

Comment Code

FS_ID:52195 DS_ID:16356 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls

Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

LM Start	5.33	Rating **	A/W	Issue No.	105 (cont)
LM End	5.33	Issue Type +	Ma	Location *	

on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE



Overview of levee crown at crossing looking D/S on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52195_66760.jpg



WS Flap Gate

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.		105 (cont)
LM End	5.33	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52323	6°	39.523236°
пеш				-121.70765	o°	-121.707650°
DWR ID	16356					

Comment Code

Inspector Comment

FS_ID:52195 DS_ID:16356 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears to be in good condition *F/31/2014*. Some as left

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

Photo 3 of 3: UCIP_FA_2018_52195_66763.jpg



WS view of outlet cleared of vegetation.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106
LM End	5.38	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52256	6°	39.522566 °
пеш				-121.70756	o°	-121.707560°
DWR ID	16357					

Inspector Comment

Comment Code

FS_ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.48)]

FS Date: 6/16/2017 1:05:09 PM

LM Start	5.38	Rating **	М	Issue No.	106 (cont)	
LM End	5.38	Issue Type +	Ma	Location *		



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52196_66765.jpg



View of WS slope and channel.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.38	Rating **	М	Issue No.		106 (cont)
LM End	5.38	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.52256	6°	39.522566 °
пеш				-121.70756	0°	-121.707560 °
DWR ID	16357					

Comment Code

Inspector Comment

FS_ID:52196 DS_ID:16357 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.48)] FS Date: 6/16/2017 1:05:09 PM



View of WS flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		107	
LM End	5.63	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5192	12 °	39.519212°	
пеш				-121.7090	30°	-121.709030 °	
DWR ID	16359					·	

Inspector Comment

Comment Code

FS ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried-needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]

FS Date: 6/16/2017 1:29:37 PM

LM Start	5.63	Rating **	М	Issue No.	107 (cont)
LM End	5.63	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52201_66793.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP FA



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.63	Rating **	М	Issue No.		107 (cont)
LM End	5.63	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Itom	DWR UCI	P LMA Respo	nsibility	39.51921	2°	39.519212°
Item				-121.70903	o°	-121.709030°
DWR ID	16359					

Inspector Comment

Comment Code

FS_ID:52201 DS_ID:16359 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.73)] FS Date: 6/16/2017 1:29:37 PM

Photo 3 of 3: UCIP_FA_2018_52201_66791.jpg



View of WS flap gate buried.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108			
LM End	5.87	Issue Type +	Ma	Location *					
Catagony	Supplemental				GPS Latitude/Longitude				
Category			Start		End				
Item	DWR UCIP LMA Responsibility			39.5160	59°	39.516059°			
пеш				-121.7108 ⁻	10°	-121.710810°			
DWR ID	16360								

Inspector Comment

Comment Code

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM

LM Start	5.87	Rating **	A/W	Issue No.	108 (cont)
LM End	5.87	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52202_66800.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52202_66801.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.		108 (cont)		
LM End	5.87	Issue Type +	Ma	Location *				
Catagony	Supplemental				GPS Latitude/Longitude			
Category			Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.5160	59°	39.516059°		
пеш				-121.7108	10°	-121.710810°		
DWR ID	16360							

Inspector Comment

Comment Code

FS_ID:52202 DS_ID:16360 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM



Flap gate WS

LM Start	6.03	Rating **	Α	Issue No.		55	
LM End	6.03	Issue Type +	Ma	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	, Vegetation				18°	39.514018°	
пеш				-121.7120	27°	-121.712027°	
DWR ID DWR_MA0013_01_f _ 2018_55							
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

The vegetation was mowed on both slopes.

Photo 1 of 1: FA_2018_MA0013_300_55_20181102_00141.jpg



View of the mowed vegetation on both slopes.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.17	Rating **	М	Issue No.		67		
LM End	6.17	Issue Type +	En	Location *		LS		
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroach	ments	39.5121	57°	39.512157°			
пеш				-121.713171 ° -121.7		-121.713171°		
DWR ID DWR_MA0013_01_f _ 2016_67								
		Comn	nent Cod	de				
DT : Ditch								
Inspector Comment								

No Photos

LM Start	6.23	Rating **	M	Issue No.		109
LM End	6.23	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5113	37°	39.511337°
пеш				-121.7136	20°	-121.713620°
DWR ID	16361					

Comment Code

Inspector Comment

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

Photo 1 of 3: UCIP_FA_2018_52203_66808.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		109 (cont)
LM End	6.23	Issue Type +	Ма	Location *		
Category	Suppleme	ental	ntal			le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.511337°		39.511337°
пеш				-121.7136	20°	-121.713620°
DWR ID	16361					

Comment Code

Inspector Comment

FS_ID:52203 DS_ID:16361 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

LM Start	.M Start 6.23 Rating **		М	Issue No.	109 (cont)
LM End	6.23	Issue Type +	Ma	Location *	

Photo 2 of 3: UCIP_FA_2018_52203_66806.jpg



View of WS slope and toe.

Photo 3 of 3: UCIP_FA_2018_52203_66804.jpg



View of WS flap gate.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.41	Rating **	М	Issue No.		3			
LM End	6.99	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		39.508928 ° 39.501					
пеш				-121.7148	-121.719715°				
DWR ID DWR_MA0013_01_s _ 2012_3									
Comment Code									
DT : Ditch									
		Inspecto	or Comm	nent					

Photo 1 of 1 : FA_2018_MA0013_300_3_20180905_00001.jpg



View of the agricultural ditch along the toe.

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		110		
LM End	6.99	Issue Type +	Ma	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.501479°		39.501479°		
пеш				-121.7197	10°	-121.719710°		
DWR ID	WR ID 16329							
	Comment Code							

Inspector Comment

FS ID:52211 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM

LM Start	6.99	Rating **	М	Issue No.	110 (cont)
LM End	6.99	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP_FA_2018_52211_66833.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP FA 2018 52211 66832.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		110 (cont)
LM End	6.99	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.50147	'9	39.501479°
пеш				-121.71971	0 °	-121.719710°
DWR ID	16329					·

Inspector Comment

Comment Code

FS_ID:52211 DS_ID:16329 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM



WS Flap Gate

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		111		
LM End	7.22	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.49884	15 °	39.498845°		
item				-121.7224	10°	-121.722440 °		
DWR ID	16354							
Comment Code								

Inspector Comment

FS ID:52212 DS_ID:16354 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 1 of 3: UCIP_FA_2018_52212_66844.jpg



Overview of levee crown at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		111 (cont)		
LM End	7.22	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.4988	45 °	39.498845°		
item						-121.722440°		
DWR ID	DWR ID 16354							
Comment Code								

Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 2 of 3: UCIP_FA_2018_52212_66845.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.22	Rating **	М	Issue No.		111 (cont)
LM End	7.22	Issue Type +	Ма	Location *		
Category			GPS La	e/Longitude		
Calegory	legory					End
Item	DWR UCI	P LMA Respo	nsibility	39.49884	5°	39.498845°
пеш			-121.72244	o Ol	-121.722440°	
DWR ID	16354					·

Comment Code Inspector Comment

FS_ID:52212 DS_ID:16354 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM



WS Flap Gate

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.		112
LM End	7.46	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Category	Category				Start	
Item	DWR UCI	P LMA Respo	nsibility	39.49614	6°	39.496146°
item				-121.72516	o°	-121.725160°
DWR ID	16352					

Inspector Comment

Comment Code

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

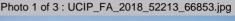
UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont)
LM End	7.46	Issue Type +	Ma	Location *	





View of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52213_66851.jpg



WS view of slope and channel.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.		112 (cont)			
LM End	7.46	Issue Type +	Ма	Location *					
Category	Supplemental			Supplemental			GPS La	tituc	le/Longitude
Calegory	negory					End			
Item	DWR UCI	DWR UCIP LMA Responsibility			6°	39.496146°			
пеш			-121.72516	° 0	-121.725160 °				
DWR ID	16352								

Inspector Comment

Comment Code

FS_ID:52213 DS_ID:16352 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM



View of WS flap gate. Dense vegetation on WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		113	
LM End	7.64	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.49375	3°	39.493756°	
пеш				-121.72657	o°	-121.726570°	
DWR ID	16320						

Inspector Comment

Comment Code

FS_ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 7.76)]

FS Date: 6/19/2017 12:43:02 PM

LM Start	7.64	Rating **	A/W	Issue No.	113 (cont)
LM End	7.64	Issue Type +	Ma	Location *	



Overview of levee crown at crossing (past gate) looking D/S.

Photo 2 of 3: UCIP_FA_2018_52217_66865.jpg



View of WS slope, corrugated metal riser with slide gate.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: Corrected AW: Acceptable but Monitor & Maintain

** Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.		113 (cont)
LM End	7.64	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory						End
Item	DWR UCI	P LMA Respo	nsibility	39.49375	6°	39.493756°
пеш				-121.72657	0 °	-121.726570°
DWR ID	16320					

Inspector Comment

Comment Code

FS_ID:52217 DS_ID:16320 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 7.76)] FS Date: 6/19/2017 12:43:02 PM



WS Slide gate

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		114	
LM End	8.00	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory		Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.48906	1°	39.489061 °	
пеш				-121.72943	o°	-121.729430 °	
DWR ID	16321						

Inspector Comment

Comment Code

FS_ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears to be in good condition.

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM

LM Start	8.00	Rating **	A/W	Issue No.	114 (cont)
LM End	8.00	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52218_66872.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52218_66873.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.		114 (cont)	
LM End	8.00	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.48906 ²	°	39.489061	0
пеш				-121.729430	°	-121.729430	0
DWR ID	16321						

Inspector Comment

Comment Code

FS_ID:52218 DS_ID:16321 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM



WS Flap gate

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.	115		
LM End	8.27	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Start En						
Item	DWR UCI	P LMA Respo	nsibility	39.48543	32 °	39.485432°	
пеш				-121.73159	90°	-121.731590°	
DWR ID 16322							
Comment Code							

Inspector Comment

FS_ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

LM Start	8.27	Rating **	М	Issue No.	115 (cont)
LM End	8.27	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52219_66874.jpg



View of WS slope and toe.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.27	Rating **	М	Issue No.		115 (cont)		
LM End	8.27	Issue Type +	Ma	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
Item	DWR UCI	39.4854	32°	39.485432				
пеш			-121.7315	90°	-121.731590			
DWR ID	16322							

Inspector Comment

Comment Code

FS ID:52219 DS_ID:16322 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

Photo 3 of 3: UCIP_FA_2018_52219_66877.jpg

View of WS flap gate and headwall.

LM Start	8.81	Rating **	М	Issue No.		49			
LM End	8.81	Issue Type +	Ma	Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude					
Category				Start		End			
Item	Erosion / Bank Caving			39.478648°		39.478648°			
item				-121.7364	77 °	-121.736477°			
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_49								
Comment Code									
E2 · Schoo	E2 : Schodula rapair of arcsion site prior to the payt inspection								

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_300_49_20180905_00006.jpg

View of the erosion site along the landside toe.

Page 57 of 102

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		116
LM End	8.82	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	39.4785	73 °	39.478573°		
пеш	item				50°	-121.736550°
DWR ID	16323					·

Inspector Comment

Comment Code

FS_ID:53310 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; crossing remains Urgent because LS erosion is still present and poses a levee integrity risk (D. Sanoski - DWR UCIP).6/14/2017 LS underwater but levee erosion is still present- needs to be repaired. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - freitay)13/20143 Same as last inspection. (DWR Sutter Yard -

afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana) FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)]

Photo 1 of 3: UCIP_FA_2018_53310_66881.jpg



Catwalk and screw gate located on WS.

FS Date: 8/23/2018 2:32:00 PM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		116 (cont)
LM End	8.82	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longit				
Calegory	Category					End
Item	DWR UCI	P Field Study		39.47857	3°	39.478573°
пеш				-121.73655	o°	-121.736550°
DWR ID	16323					·

Inspector Comment

Comment Code

FS_ID:53310 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; crossing remains Urgent because LS erosion is still present and poses a levee integrity risk (D. Sanoski - DWR UCIP).6/14/2017 LS underwater but levee erosion is still present- needs to be repaired. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana) FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on

the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE

Sacramento O&M Manual 519, June 1962 (HLM 8.95)] FS Date: 8/23/2018 2:32:00 PM



Catwalk & gate located on WS. No daylight point on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.		116 (cont)		
LM End	8.82	Issue Type +	En	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category					End		
Item	DWR UCIP Field Study			39.47857	3°	39.478573 °		
пеш				-121.73655	0 °	-121.736550 °		
DWR ID	16323							

Inspector Comment

Comment Code

FS ID:53310 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; crossing remains Urgent because LS erosion is still present and poses a levee integrity risk (D. Sanoski - DWR UCIP).6/14/2017 LS underwater but levee erosion is still present- needs to be repaired. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana) FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE

Sacramento O&M Manual 519, June 1962 (HLM 8.95)]

FS Date: 8/23/2018 2:32:00 PM

Photo 3 of 3: UCIP_FA_2018_53310_66882.jpg



View of LS structure. Erosion present behind headwall.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.		117	
LM End	8.84	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR UCI	P LMA Respo	nsibility	39.47828	1°	39.478281 °	
пеш			-121.73678	o°	-121.736780 °		
DWR ID	16325						

Inspector Comment

Comment Code

FS_ID:52223 DS_ID:16325 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope

has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

LM Start	8.84	Rating **	М	Issue No.	117 (cont)
LM End	8.84	Issue Type +	Ма	Location *	



Overview of levee crown at crossing looking D/S.

Photo 2 of 3: UCIP_FA_2018_52223_66897.jpg



View of WS slope with 2 slide gates.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.84	Rating **	М	Issue No.	117 (cont)			
LM End	8.84	Issue Type +	Ma	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.47828	1°	39.478281°		
пеш				-121.73678	o°	-121.736780°		
DWR ID	16325							
	Comment Code							

Inspector Comment

FS_ID:52223 DS_ID:16325 EP_NO: N/A

1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s):

DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June



View of slide gate on WS. Debris blocking gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.89	Rating **	М	Issue No.		118	
LM End	8.89	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start			End		
Itom	DWR UCI	P Field Study	39.4775	88°	39.477588°		
Item Street Street			-121.7370	40°	-121.737040°		
DWR ID	16828					·	

Inspector Comment

Comment Code

FS_ID:52225 DS_ID:16828 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Erosion still present on the side of the LS

structure- still not affecting levee yet. (DWR Sutter Yard-AFreitag)11/16/2016 Some erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-AFreitag)4/28/2016 Erosion happening around the concrete structure

on LS. Its not yet affecting the levee but will keep

monitoring.7/13/2015 Crossing appears in good condition. No

noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

last inspection.4/18/2012 Crossing is not visible on WS.

FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtenances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.02)] FS Date: 6/19/2017 1:05:30 PM

LM Start	8.89	Rating **	М	Issue No.	118 (cont)
LM End	8.89	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_FA_2018_52225_66908.jpg



Overview picture looking south

Photo 2 of 3: UCIP_FA_2018_52225_66907.jpg



Headwall at LS distribution box

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.89	Rating **	М	Issue No.		118 (cont)
LM End	8.89	Issue Type +	En	Location *		
Category Supplemental C				GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.47758	8 °	39.477588 °
пеш				-121.73704	0 °	-121.737040 °
DWR ID	16828					

Comment Code

Inspector Comment

FS_ID:52225 DS_ID:16828 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Erosion still present on the side of the LS

structure- still not affecting levee yet. (DWR Sutter Yard-AFreitag)11/16/2016 Some erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-

AFreitag)4/28/2016 Erosion happening around the concrete structure

on LS. Its not yet affecting the levee but will keep

monitoring.7/13/2015 Crossing appears in good condition. No

noticeable issues to report.5/21/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

last inspection.4/18/2012 Crossing is not visible on WS.

FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtenances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.02)] FS Date: 6/19/2017 1:05:30 PM

Photo 3 of 3: UCIP_FA_2018_52225_76257.jpg



Enter photo 3 description or comment here.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.90	Rating **	M	Issue No.		119
LM End	8.90	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4775	30°	39.477530°
пеш				-121.7370	60°	-121.737060°
DWR ID	16328					·

Comment Code

Inspector Comment

FS_ID:52226 DS_ID:16328 EP_NO: 1234A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/14/2017 WS marker missing. (DWR Sutter Yard-AFreitag)11/16/2016 WS marker is knocked over and laying on the ground. (DWR Sutter Yard-AFreitag)4/28/2016 Marker missing on WS.7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.

FIELD_STRUCT_DESC: Underground telephone cable through the levee at an unknown depth below the crown. (Permit No. 1234, 1234A, 1947 - Pacific Telephone and Telegraph Company [PT&T]) [Additional

Reference(s): DWR Levee Log, 1993] FS Date: 6/19/2017 1:08:10 PM



Underground telephone cable marker located on WS.

LM Start	8.92	Rating **	М	Issue No.	65			
LM End	9.33	Issue Type +	En	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory		Start End						
Encroachments				39.477245°		39.471975°		
пеш				-121.737253 ° -121.740795				
DWR ID	DWR_MA0	013_01_f _ 201	6_65					
		Comn	nent Cod	de				
FE : Fence								
		Inspecto	or Comm	nent				

No Photos

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		120
LM End	8.95	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.4768	39°	39.476839°
пеш				-121.7375	40°	-121.737540°
DWR ID	16317					

Inspector Comment

Comment Code

FS ID:52227 DS_ID:16317 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

FS Date: 6/19/2017 1:09:21 PM

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519. June 1962 (HLM 9.09)]

	U.C.	
Control of the second		
	经建立的	
The difference of		
emand that is	open a	海 尔登瓦湾
Overview of levee crown a	t crossing looki	ng downstream

Photo 1 of 3: UCIP_FA_2018_52227_66910.jpg

Rating ** A/W Issue No. 120 (cont) LM Start 8.95 Issue Type + Location 3 LM End 8.95 Ma

Photo 2 of 3: UCIP_FA_2018_52227_66911.jpg



View of WS slope and toe.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N: Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.		120 (cont)
LM End	8.95	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	tuc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.47683	9°	39.476839°
пеш				-121.73754	o°	-121.737540°
DWR ID	16317					

Inspector Comment

UCIP Comments: 6/14/2017 Crossing appears to be in good condition.

Comment Code

FS_ID:52227 DS_ID:16317 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends.

Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM Photo 3 of 3: UCIP_FA_2018_52227_66912.jpg



View of LS slope and toe.

LM Start	9.70	Rating **	М	Issue No.		5	
LM End	9.72	Issue Type +	Ма	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category	ategory					End	
Itom	Trim / Thi	n Trees		39.4671	70°	39.466860 °	
пеш	-121.743887 ° -121.74410					-121.744108°	
DWR ID DWR_MA0013_01_s _ 2012_5							
	Comment Code						

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope and toe.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.73	Rating **	М	Issue No.		10	
LM End	9.75	Issue Type +	En	Location *		LS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachi	ments		39.4667	'32 °	39.466478°	
item				-121.7441	-121.744338°		
DWR ID DWR_MA0013_01_f _ 2013_10							
		Comn	nent Cod	de			
MA : Mate	rial						
Inspector Comment							
Move the trailer and materials outside the 10 foot easement.							



View of a trailer and material along the landside toe.

LM Start	9.75	Rating **	М	Issue No.		64
LM End	9.75	Issue Type +	Ma	Location *	LS	
Category	Earthen L	Levee GPS Latitude/Longit				le/Longitude
Calegory	Lategory			Start		End
Item	Trim / Thi	n Trees		39.4664	78°	39.466478°
item						-121.744338°
DWR ID DWR_MA0013_01_f _ 2016_64						
Comment Code						

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

LM Start	9.90	Rating **	М	Issue No.		63	
LM End	9.90	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Category				Start		End	
Item	Encroach	ments		39.4645	27°	39.464527	c
item				-121.7455	68°	-121.745568	c
DWR ID	DWR_MA0	013_01_f _ 201	6_63				
		Comn	nent Cod	de			
FE : Fence	Э						
							_
		Inspect	or Comm	nent			

No Photos

* Location LS: Land Side

N/A: Not Applicable WS: Water Side U : Unacceptable

A : Acceptable M : Minimally Acceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.		121
LM End	11.03	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.44988	6°	39.449886°
пеш				-121.75505	0°	-121.755050 °
DWR ID	16332					

Inspector Comment

Comment Code

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM

LM Start	11.03	Rating **	A/W	Issue No.	121 (cont)
LM End	11.03	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52232_66926.jpg



View of WS corrugated metal riser and concrete wall.

Photo 2 of 3: UCIP_FA_2018_52232_66925.jpg



Corrugated metal riser with owner information.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.		121 (cont)
LM End	11.03	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.44988	6°	39.449886°
пеш			-121.75505	0 °	-121.755050°	
DWR ID	16332					

Inspector Comment

Comment Code

FS_ID:52232 DS_ID:16332 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM



Trash rack on WS headwall.

LM Start	11.58	Rating **	A/W	Issue No.		4			
LM End	11.59	Issue Type +	Ma	Location *	WS				
Category	Suppleme	GPS Latitude/Longitude							
Calegory			Start		End				
Item	2017 USACE Erosion Survey,			39.44282	21 °	39.442738°			
itein	DRAFT		-121.7598	51 °	-121.759908°				
DWR ID DWR_MA0013_01_s _ 2016_4									
Comment Code									

Inspector Comment

2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.		122
LM End	11.60	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.44263	9°	39.442639°
пеш				-121.76007	o°	-121.760070°
DWR ID	16333					

Inspector Comment

Comment Code

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

LM Start	11.60	Rating **	A/W	Issue No.	122 (cont)
LM End	11.60	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52233_66934.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52233_66932.jpg



WS slide gate with owner information.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.		122 (cont)	
LM End	11.60	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory	Category					End	
Item	DWR UCI	IP LMA Respo	onsibility	39.44263	9°	39.442639°	
пеш				-121.76007	o°	-121.760070°	
DWR ID	16333						

Inspector Comment

Comment Code

FS_ID:52233 DS_ID:16333 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last increasing 13/2/2013 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM



Trash rack on WS headwall.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.		123
LM End	12.19	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.43516	9°	39.435169°
пеш				-121.76529	o°	-121.765290°
DWR ID	16334					

Inspector Comment

Comment Code

FS ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM

LM Start	12.19	Rating **	М	Issue No.	123 (cont)
LM End	12.19	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP_FA_2018_52234_66940.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52234_66936.jpg



View of Ws slope and channel.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	М	Issue No.	123 (cont)	
LM End	12.19	Issue Type +	Ма	Location *		
Category				GPS Lat	ituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.43516	9°	39.435169°
item				-121.76529	o°	-121.765290 °
DWR ID	16334					

Comment Code

Inspector Comment

FS_ID:52234 DS_ID:16334 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end. 7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM



Slide gate located on WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	A/W	Issue No.		124
LM End	12.19	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.43515	2 °	39.435152°
item				-121.76530	0°	-121.765300°
DWR ID	16335					

Inspector Comment

Comment Code

FS_ID:52235 DS_ID:16335 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope

has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:26:05 PM

LM Start	12.19	Rating **	A/W	Issue No.	124 (cont)
LM End	12.19	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52235_66949.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52235_66947.jpg



View from levee crown of WS slope and channel.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.19	Rating **	A/W	Issue No.	124 (cont)	
LM End	12.19	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.43515	2 °	39.435152°
item				-121.76530	0°	-121.765300°
DWR ID	16335					·

Comment Code

Inspector Comment

FS ID:52235 DS_ID:16335 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope

has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:26:05 PM

Photo 3 of 3: UCIP_FA_2018_52235_66948.jpg



Water side screw gate located near crown hinge

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.		125
LM End	12.74	Issue Type +	Ma	Location *		
Category				GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.42807	o°	39.428070 °
item				-121.77008	o°	-121.770080 °
DWR ID	16336					

Inspector Comment

Comment Code

FS_ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM

LM Start	12.74	Rating **	М	Issue No.	125 (cont)
LM End	12 74	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52236_66952.jpg

Overview picture looking south on right bank of Cherokee Canal.

Photo 2 of 3: UCIP_FA_2018_52236_66959.jpg



View of WS slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.74	Rating **	М	Issue No.	125 (cont)		
LM End	12.74	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lati	tud	le/Longitude	
Category				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.42807	°	39.428070	0
item				-121.77008	°	-121.770080	0
DWR ID	16336						

Inspector Comment

Comment Code

FS_ID:52236 DS_ID:16336 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM

Photo 3 of 3: UCIP_FA_2018_52236_66951.jpg



Slide gate located on WS slope. Owner information marked on gate.

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.29	Rating **	М	Issue No.		126
LM End	13.29	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.42108	88°	39.421088 °
пеш				-121.77510)4°	-121.775104°
DWR ID	16461					

Inspector Comment

Comment Code

FS_ID:52237 DS_ID:16461 EP_NO: 17030

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/15/2017 No markers present near this levee unit. (DWR Sutter Yard- AFreitag)11/17/2016 Markers missing near the levee. Oly marker present is located on the East side of the Unit2 levee. (DWR Sutter Yard- AFreitag)4/28/2016 Lines lines are suspected to be located on the upstream side of the roadway bridge and not the downstream side like the coordinates in this report show. Will need to take new coordinate readings. Markers are missing near levees.7/13/2015 Unable to locate.5/21/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate any markers.4/18/2012 Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility markers.

FIELD_STRUCT_DESC: 8-inch high density polyethylene (HDPE) communication conduit, contains three 2-inch and three 1.5-inch fiber optic cables, backfilled with bentonite on the ends of the bore casing through the levee at an unknown depth below the crown. Conduit is bored across and under Cherokee Canal and its levees. Permit records indicates the conduit is at least 5 feet below the bottom of the low flow of the channel. Owner is listed in the permit as Pacific Fiber Link LLC but permit Inspection sheets list Worldwide Fiber. (Permit No. 17030, 2000 - Worldwide Fiber)

FS Date: 6/19/2017 1:30:37 PM

LM Start	13.29	Rating **	М	Issue No.	126 (cont)
LM End	13.29	Issue Type +	En	Location *	



Marker located along side of road about 200 yds east of levees



Crossing owner contact info

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.		127		
LM End	13.33	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.4206	67°	39.420667°		
пеш				-121.7757	00°	-121.775700°		
DWR ID	DWR ID 16337							
Comment Code								

Inspector Comment

FS_ID:52238 DS_ID:16337 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM

 LM Start
 13.33
 Rating **
 A/W
 Issue No.
 127 (cont)

 LM End
 13.33
 Issue Type +
 Ma
 Location *



Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52238_66963.jpg



View of WS slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

	LM Start	13.33	Rating **	A/W	Issue No.	127 (cont)		
	LM End	13.33	Issue Type +	Ма	Location *			
	Category Supplemental				GPS La	tituc	le/Longitude	
					Start		End	
	Item	DWR UCI	IP LMA Respo	onsibility	39.4206	67°	39.420667	0
	пеш				-121.7757	00°	-121.775700	0
	DWR ID	16337						

Comment Code

Inspector Comment

FS_ID:52238 DS_ID:16337 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM



View of WS slope and channel.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.		128	
LM End	13.76	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UC	IP LMA Respo	nsibility	39.4168	33 °	39.416833°	
пеш				-121.7819	30°	-121.781930°	
DWR ID 16338							
Comment Code							

Inspector Comment

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet

still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired.

Limited inspection on LS due to fallen tree.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM



WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.	128 (cont)			
LM End	13.76	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory	Calegory					End		
Item	DWR UCI	P LMA Respo	nsibility	39.41683	3°	39.416833°		
пеш				-121.78193	° o	-121.781930°		
DWR ID 16338								
Comment Code								

Inspector Comment

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

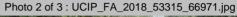
UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired.

FS Date: 8/23/2018 2:42:00 PM

Limited inspection on LS due to fallen tree.





View of channel at crossing.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.76	Rating **	М	Issue No.		128 (cont)
LM End	13.76	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.41683	3°	39.416833°
пеш				-121.78193	o°	-121.781930°
DWR ID	16338					·

Inspector Comment

Comment Code

FS_ID:53315 DS_ID:16338 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Photo 3 of 3: UCIP_FA_2018_53315_66969.jpg

Tree fallen at LS headwall.

*Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Manual 519, June 1962 (HLM 13.96)] FS Date: 8/23/2018 2:42:00 PM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.77	Rating **	М	Issue No.		129
LM End	13.77	Issue Type +	Ма	Location *		
Category Supplemental			Supplemental GPS Latitude/Long			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.41675	6°	39.416756°
пеш				-121.78206	o°	-121.782060 °
DWR ID	16339					

Inspector Comment

Comment Code

FS_ID:52240 DS_ID:16339 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Nonfunctional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID#

USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS

FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]

FS Date: 6/19/2017 1:53:35 PM

LM Start	13.77	Rating **	М	Issue No.	129 (cont)
LM End	13.77	Issue Type +	Ma	Location *	



Buried slide gate on the WS slope.

Photo 2 of 2: UCIP_FA_2018_52240_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

*Location

LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating

A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable but Monitor & Maintain

* Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.22	Rating **	М	Issue No.		59		
LM End	14.22	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS L	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.4127	'26 °	39.412726°		
iteiii				-121.7886	58°	-121.788658 °		
DWR ID DWR_MA0013_01_f _ 2016_59								
		Comn	nent Cod	de				
DE : Debri	s							
			_					
		Inspecto	or Comm	nent				
Remove the debris from the landside slope.								

Photo 1 of 1 : FA_2018_MA0013_300_59_20180905_00010.jpg

View of the debris along the landside slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		Issue No.		130
LM End	14.58	Issue Type +	Ма	Location *				
Category Supplemental			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.40948	1°	39.409481 °		
пеш				-121.79401	0 °	-121.794010 °		
DWR ID	16368							

Inspector Comment

Comment Code

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 8/23/2018 9:14:00 AM



Headwall and flapgate located on water side of levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.		130 (cont)
LM End	14.58	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.40948	1°	39.409481 °
пеш			-121.79401	o°	-121.794010°	
DWR ID	16368					

Inspector Comment

Comment Code

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 8/23/2018 9:14:00 AM

Photo 2 of 3: UCIP_FA_2018_53317_66974.jpg



Headwall and flapgate located on water side of levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.	130 (cont)	
LM End	14.58	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.40948	1°	39.409481 °
пеш				-121.79401	o°	-121.794010°
DWR ID	16368					

Inspector Comment

Comment Code

FS_ID:53317 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern: possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 8/23/2018 9:14:00 AM

Photo 3 of 3: UCIP_FA_2018_53317_66975.jpg



Head wall and screw gate located on land side of levee

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131
LM End	14.91	Issue Type +	Ma	Location *		
Category			GPS La	atitud	e/Longitude	
Calegory				Start End		End
Item	DWR UCI	P LMA Respo	onsibility	39.4065	70°	39.406570°
пеш				-121.7987	70°	-121.798770°
DWR ID	16367					

Comment Code

Inspector Comment

FS_ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection 7/15/2013 Store as last inspection 7/15/2013 Store

inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

FS Date: 6/19/2017 2:01:26 PM

LM Start	14.91	Rating **	A/W	Issue No.	131 (cont)
LM End	14.91	Issue Type +	Ма	Location *	



WS headwall and flapgate

Photo 2 of 3: UCIP_FA_2018_52242_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.		131 (cont)
LM End	14.91	Issue Type +	Ма	Location *		
Category Supplemental GPS Latitude/Lo				e/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.4065	70°	39.406570°
пеш				-121.7987	70°	-121.798770°
DWR ID	16367					

Inspector Comment

Comment Code

FS ID:52242 DS_ID:16367 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

FS Date: 6/19/2017 2:01:26 PM

Photo 3 of 3: UCIP_FA_2018_52242_66982.jpg



WS slope cleared of vegetation

LM Start	15.58	Rating **	М	Issue No.		57	
LM End	15.58	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory			Start			End	
Item	Slope Sta	bility		39.4003	80°	39.400380°	
item				-121.8084	32°	-121.808432 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_57				
Comment Code							
04 D :							

S1: Repair slope instability.

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_300_57_20180905_00009.jpg



View of slope instability along the landside slope.

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Ma: Maintenance Deficiency WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.	132			
LM End	15.72	Issue Type +	En	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start End				
Item	DWR UC	P Field Study		39.3990	51 °	39.399051°		
пеш				-121.8105	50°	-121.810550°		
DWR ID	16364							
	Comment Code							

Inspector Comment

FS ID:52243 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)]

FS Date: 6/19/2017 2:02:42 PM

Photo 1 of 3: UCIP_FA_2018_52243_66989.jpg



Overview of levee crown at crossing looking downstream.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.	132 (cont)	
LM End	15.72	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Sategory			Start		End
Itom	DWR UCI	P Field Study		39.39905 ²	°	39.399051 °
Item		-121.810550)°	-121.810550°		
DWR ID	16364					

Inspector Comment

Comment Code

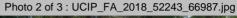
FS_ID:52243 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)]

FS Date: 6/19/2017 2:02:42 PM





View of WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.72	Rating **	М	Issue No.		132 (cont)
LM End	15.72	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.39905 ²	°	39.399051 °
пеш				-121.810550)°	-121.810550°
DWR ID	16364					

Inspector Comment

Comment Code

FS_ID:52243 DS_ID:16364 EP_NO: 7521

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends completely submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)]

FS Date: 6/19/2017 2:02:42 PM

Photo 3 of 3 : UCIP_FA_2018_52243_66986.jpg



View of headwall within channel.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		133	
LM End	15.77	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	DWR UC	IP Field Study		39.39861	5 °	39.398615	
пеш				-121.81125	o°	-121.811250 °	
DWR ID	16373						

Inspector Comment

Comment Code

FS ID:52244 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends submerged during site visit. LS ditch near pipe end is heavily vegetated and covering the pipe end. There is some erosion happening at the LS levee toe but this is more of a ditch problem and not a problem with the pipe. (DWR Sutter Yard- AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log,

FS Date: 6/19/2017 2:04:34 PM

LM Start	15.77	Rating **	М	Issue No.	133 (cont)
LM End	15.77	Issue Type +	En	Location *	

Photo 1 of 3: UCIP_FA_2018_52244_66993.jpg



WS view of appurtances (catwalk, slide gate, and headwall)

Photo 2 of 3: UCIP FA 2018 52244 66995.jpg



WS view of catwalk, slide/screw gate, and headwall

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.77	Rating **	М	Issue No.		133 (cont)
LM End	15.77	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.3986	15 °	39.398615°
пеш				-121.8112	50°	-121.811250°
DWR ID	16373					

Inspector Comment

Comment Code

FS_ID:52244 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Both pipe ends submerged during site visit. LS ditch near pipe end is heavily vegetated and covering the pipe end. There is some erosion happening at the LS levee toe but this is more of a ditch problem and not a problem with the pipe. (DWR Sutter Yard- AFreitag)11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden wlalkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD STRUCT DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log,

Photo 3 of 3 : UCIP_FA_2018_52244_66996.jpg

LS view of shoulder and slope.

FS Date: 6/19/2017 2:04:34 PM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.19	Rating **	A/W	Issue No.		134
LM End	16.19	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.39474	8°	39.394748 °
пеш				-121.81736	0°	-121.817360°
DWR ID	16372					

Inspector Comment

Comment Code

FS_ID:52245 DS_ID:16372 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD_STRUCT_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

FS Date: 6/19/2017 2:09:30 PM

LM Start	16.19	Rating **	A/W	Issue No.	134 (cont)
LM End	16.19	Issue Type +	Ma	Location *	



WS view of structure.

Photo 2 of 3: UCIP_FA_2018_52245_74503.jpg



View of crossing and panels attached to concrete walls.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.19	Rating **	A/W	Issue No.		134 (cont)
LM End	16.19	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.39474	3°	39.394748°
пеш				-121.81736	°	-121.817360°
DWR ID	16372					

Comment Code

Inspector Comment

FS ID:52245 DS_ID:16372 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD_STRUCT_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

FS Date: 6/19/2017 2:09:30 PM





LS view of structure

LM Start	16.22	Rating **	M	Issue No.		7	
LM End	17.17	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			39.3945	23 °	39.385580	0
item				-121.8176	30°	-121.831282	0
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_7						
		Comn	nent Coc	le			
DT : Ditch							
Inspector Comment							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.52	Rating **	M	Issue No.		56
LM End	16.52	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		39.3916	75°	39.391675°
пеш					32°	-121.821932°
DWR ID	DWR ID DWR_MA0013_01_f _ 2016_56					
Comment Code						
T1 : Trim t	rees to at l	east five feet	above g	round level		
Inspector Comment						



View of dense trees along the landside toe.

LM Start	17.18	Rating **	М	Issue No.		135
LM End	17.18	Issue Type +	En	Location *		
Category	egory Supplemental			GPS Latitude/Longitude		
Category				Start		End
Item	DWR UCIP Field Study			39.3855	40°	39.385540°
пеш				-121.8312	80°	-121.831280°
DWR ID	16371					
		_				

Comment Code

Inspector Comment

FS_ID:52246 DS_ID:16371 EP_NO: 3511

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/15/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)5/03/2016 Unable to locate.7/13/2015 Unable to locate.5/22/2014 Same as last inspection.12/3/2013 Unable to

locate.7/15/2013 Same as last inspection. Unable to

locate.4/18/2012 Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees.

FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3 feet below the crown. (Permit No. 3511, 1961 - US Army Engineer District) [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/19/2017 2:11:48 PM

No Photos

	* Location	** Rating		+ Issue Type
ı	LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
- 1	WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
- 1	CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		136
LM End	17.23	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP LMA Responsibility			39.38517	2°	39.385172°
пеш				-121.83206	o°	-121.832060 °
DWR ID	16369					·

Inspector Comment

Comment Code

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

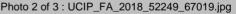
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 [HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM

LM Start	17.23	Rating **	М	Issue No.	136 (cont)
LM End	17.23	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_FA_2018_52249_67017.jpg

View of WS slope and toe.





View of WS headwall and flap gate.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.23	Rating **	М	Issue No.		136 (cont)
LM End	17.23	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP LMA Responsibility			39.38517	2 °	39.385172°
пеш				-121.83206	0 °	-121.832060 °
DWR ID	16369					

Inspector Comment

Comment Code

FS_ID:52249 DS_ID:16369 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM

Photo 3 of 3: U	JCIP_FA_2018_52249_67018.jpg
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View of LS headwall.

LM Start	17.46	Rating **	М	Issue No.		9			
LM End	17.50	Issue Type +	En	Location *		LS			
Category	Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End			
Item	ments	39.3829	943°	39.382635°					
item				-121.8354	-121.836012				
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_9								
		Comn	nent Cod	de					
DT : Ditch									
		Inspecto	or Comm	nent					

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.47	Rating **	М	Issue No.		15		
LM End	17.94	Issue Type +	En	Location *		LS		
Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Encroachments				852°	39.378481 °		
пеш				-121.8356	54°	-121.842394°		
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_15							
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles
Unit No. 02 Cherokee Canal	Left	22.84

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/17/2018 - 4/17/2018		10/31/2018 - 10/31/2018	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Shawn Freitag Sutter Maintenance Yard		Shawn Freitag Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		912	
LM End	0.05	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCIP LMA Responsibility			39.5738	16°	39.573816°	
item	item				90°	-121.701290 °	
DWR ID	16397					·	

Comment Code

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE CESPK M13G 2011 p 0009 for WS flap gate not functioning

omagana)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe
through the levee, 6 feet below the crown. Concrete "U" headwalls on
both WS and landside (LS). Flap gate on the waterside (WS) end.
[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento
O&M Manual 519, June 1962 (HLM 0.04].

properly as irrigation pipe passes inside crossing. (DWR UCIP -

FS Date: 6/7/2017 12:00:22 PM



Overview looking south on left levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.	912 (cont)			
LM End	0.05	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start	End			
Item	DWR UCIP LMA Responsibility			39.573816°		39.573816°		
item			-121.7012	90°	-121.701290°			
DWR ID	16397							
Comment Code								

Inspector Comment

FS_ID:52111 DS_ID:16397 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID#

USACE_CESPK_M13G_2011_p_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04]. FS Date: 6/7/2017 12:00:22 PM



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

CR: Crown

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.	912 (cont)		
LM End	0.05	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5738	16°	39.573816°	
item				-121.7012	90°	-121.701290°	
DWR ID 16397							
Comment Code							

Inspector Comment

FS ID:52111 DS_ID:16397 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE CESPK M13G 2011 p 0009 for WS flap gate not functioning

omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

properly as irrigation pipe passes inside crossing. (DWR UCIP -

FS Date: 6/7/2017 12:00:22 PM



LS headwall blocked by overgrown branches.

CR: Crown

Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.06	Rating **	М	Issue No.		50		
LM End	0.06	Issue Type +	Ma	Location *		WS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category	Category					End		
Item	Trim / Thi	n Trees		39.5736	92°	39.573692	0	
пеш				-121.701286 °		-121.701286	0	
DWR ID	DWR_MA0	013_02_f _ 201	6_50					
		Comn	nent Cod	de				
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	and	I room to		
	Inspector Comment							

No Photos

LM Start	0.07	Rating **	М	Issue No.		1			
LM End	0.17	Issue Type +	En	Location *		WS			
Category Earthen Levee			GPS Latitude/Longitude						
Calegory	Category					End			
Item	Encroach	ments		39.573523°		39.572455°			
item				-121.7013	87 °	-121.702370°			
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_1								
Comment Code									
FO : Faviament									

No Photos

EQ: Equipment

Inspector Comment

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.		913	
LM End	0.58	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.5664	79°	39.566479°	
item				-121.7024	30°	-121.702430°	
DWR ID 16398							
Comment Code							

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.57)]

Manual 519, June 1962 (HLM 0.57) FS Date: 6/7/2017 12:03:30 PM



Overview looking south

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.	913 (cont)	
LM End	0.58	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitud				
Calegory	sategory					End
Item	DWR UCI	P LMA Respo	nsibility	39.56647	9 °	39.566479°
item			-121.70243	o°	-121.702430 °	
DWR ID	16398					
Comment Code						

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

Photo 2 of 3: UCIP_FA_2018_52112_67048.jpg



View of WS slope and toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	0.58	Rating **	М	Issue No.	913 (cont)				
LM End	0.58	Issue Type +	Ма	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory	Start					End			
Item	DWR UCI	P LMA Respo	nsibility	39.56647	'9	39.566479	0		
пеш				-121.70243	30°	-121.702430	0		
DWR ID	16398								
	Comment Code								

Inspector Comment

FS_ID:52112 DS_ID:16398 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

Photo 3 of 3: UCIP_FA_2018_52112_67045.jpg



Screw gate located on WS of levee. Screw gate covers needs to be repaired.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.60	Rating **	U	Issue No.		56	
LM End	1.63	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltem Encroachments				39.5521	95°	39.551731°	
пеш				-121.704786 °		° -121.704721°	
DWR ID DWR_MA0013_02_s _ 2016_56							
		Comn	nent Cod	de			
DT : Ditch							
		Inspecto	or Comm	nent			

Photo 1 of 1 : FA_2018_MA0013_301_56_20180905_00013.jpg

View of the agricultural ditch along the landside toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.	914			
LM End	1.70	Issue Type +	Ма	Location *				
Category	Suppleme	GPS La	tituc	de/Longitude				
Calegory	Category					End		
Item	DWR UCI	P LMA Respo	nsibility	39.55117	78 °	39.551178°		
пеш				-121.70566	60°	-121.705660 °		
DWR ID	16399	16399						
	Comment Code							

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame

is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil

and LS gate not functioning becasue of overgrown vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM Photo 1 of 3: UCIP_FA_2018_52114_67059.jpg



Overview of crossing

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.	914 (cont)			
LM End	1.70	Issue Type +	Ma	Location *				
Category	Suppleme		GPS La	titud	le/Longitude			
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.5511	78 °	39.551178°		
пеш				-121.7056	60°	-121.705660 °		
DWR ID	16399	16399						
	Comment Code							

Inspector Comment

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope &

toe. Ditch present in channel? This crossing was listed in the USACE

Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Photo 2 of 3 : UCIP_FA_2018_52114_67058.jpg



View of flap gate on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	1.70	Rating **	М	Issue No.	914 (cont)		
LM End	1.70	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Lati	le/Longitude		
Category				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.551178	°	39.551178	0
item				-121.705660	°	-121.705660	0
DWR ID	16399						

Inspector Comment

Comment Code

FS_ID:52114 DS_ID:16399 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame

is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID#

USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)]

FS Date: 6/7/2017 12:14:04 PM

Photo 3 of 3: UCIP_FA_2018_52114_67057.jpg



View of WS toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.39	Rating **	Α	Issue No.		61	
LM End	2.39	Issue Type +	Ma	Location *	LS		
Category	Catagori Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetation			39.541153 °		39.541153°	
item				-121.706070 °		-121.706070°	
DWR ID	DWR_MA0	013_02_f _ 201	8_61				
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
	Inspector Comment						
The vegetation was mowed on both slopes.							

Photo 1 of 1 : FA_2018_MA0013_301_61_20181102_00135.jpg

View of the mowed vegetation on both slopes.

LM Start	2.53	Rating **	A/W	Issue No.	915			
LM End	2.53	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Category				Start		End		
Item	DWR UC	P LMA Respo	nsibility	39.5391	95 °	39.539195°		
пеш				-121.7060	70°	-121.706070°		
DWR ID	16400	16400						
	Comment Code							

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate.

Gate can now function properly. (DWR Sutter Yard-

AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on

slide gate.

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

Photo 1 of 3: UCIP_FA_2018_52115_67063.jpg



Overview of levee crown looking south

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		915 (cont)	
LM End	2.53	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.53919	5 °	39.539195	°
пеш				-121.70607	0°	-121.706070	°
DWR ID	16400						

Comment Code

Inspector Comment

FS_ID:52115 DS_ID:16400 EP_NO: N/A

slide gate.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on

FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

Photo 2 of 3: UCIP_FA_2018_52115_67068.jpg



View of WS slope.

Photo 3 of 3: UCIP_FA_2018_52115_67064.jpg



Headwall and flap gates (2) located on WS

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.		916		
LM End	2.53	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Category	Category			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.53917	9°	39.539179°		
пеш				-121.70606	0°	-121.706060 °		
DWR ID	17169							

Inspector Comment

Comment Code

FS_ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:28:51 PM

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52116_67075.jpg



Overview at levee crown looking south

Photo 2 of 3: UCIP_FA_2018_52116_67074.jpg



View of WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)	
LM End	2.53	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory						End
Item	DWR UCI	P LMA Respo	nsibility	39.53917	9°	39.539179°
пеш			-121.70606) °	-121.706060°	
DWR ID	17169					·

Inspector Comment

Comment Code

FS_ID:52116 DS_ID:17169 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 2.54)] FS Date: 6/7/2017 12:28:51 PM Photo 3 of 3: UCIP_FA_2018_52116_67071.jpg



Headwall and flap gates (2) located on the WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		917			
LM End	2.62	Issue Type +	Ma	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start End					
Item	DWR UCI	P LMA Respo	onsibility	39.537864°		39.537864°			
пеш				-121.706190 ° -121.7061					
DWR ID	ID 16402								
Comment Code									

Inspector Comment

FS ID:52117 DS_ID:16402 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS. remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM

Photo 1 of 3: UCIP_FA_2018_52117_67077.jpg

Overview looking south from left levee

Location LS: Land Side N/A: Not Applicable

Acceptable WS: Water Side Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

CR: Crown

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.	917 (cont)		
LM End	2.62	Issue Type +	Ма	Location *			
Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.53786	4 °	39.537864°	
пеш				-121.70619	o°	-121.706190°	
DWR ID	16402					·	

Inspector Comment

Comment Code

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.	917 (cont)	
LM End	2.62	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start	End	
Item	DWR UCI	P LMA Respo	nsibility	39.53786	4 °	39.537864°
пеш				-121.70619	-121.706190°	
DWR ID	16402					
Comment Code						

Inspector Comment

FS_ID:52117 DS_ID:16402 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS. remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM

Photo 3 of 3: UCIP_FA_2018_52117_67078.jpg

Headwall and screw gate located on LS.

WS: Water Side CR: Crown A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type Ma : Mainte

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918
LM End	2.63	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.53767	1°	39.537671°
пеш			-121.70621	o°	-121.706210 °	
DWR ID	16403					

Inspector Comment

Comment Code

FS_ID:52119 DS_ID:16403 EP_NO: N/A

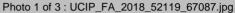
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

LM Start	2.63	Rating **	М	Issue No.	918 (cont)
LM End	2.63	Issue Type +	Ma	Location *	





Overview at levee crown looking south

Photo 2 of 3: UCIP_FA_2018_52119_67084.jpg



Headwall and flap gate located on WS

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		918 (cont)
LM End	2.63	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.53767	1°	39.537671°
пеш				-121.70621	o°	-121.706210°
DWR ID	16403					

Comment Code

Inspector Comment

FS_ID:52119 DS_ID:16403 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

Photo 3 of 3: UCIP_FA_2018_52119_67086.jpg



Headwall and screw gate located on the LS

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		919		
LM End	2.65	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.5374	66°	39.537466°		
пеш				-121.7062	40 °	-121.706240°		
DWR ID 16415								
Comment Code								

Inspector Comment

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

LM Start	2.65	Rating **	М	Issue No.	919 (cont)
LM End	2.65	Issue Type +	Ма	Location *	



Overview looking south from left levee

Photo 2 of 3: UCIP_FA_2018_52120_67091.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	2.65	Rating **	М	Issue No.		919 (cont)
LM End	2.65	Issue Type +	Ма	Location *		
Category			GPS Lat	itud	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.53746	6°	39.537466°
пеш				-121.70624	o°	-121.706240°
DWR ID	16415					

Inspector Comment

Comment Code

FS_ID:52120 DS_ID:16415 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

Photo 3 of 3 : UCIP_FA_2018_52120_67092.jpg

WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920	
LM End	3.59	Issue Type +	Ма	Location *			
Supplemental				GPS La	titud	le/Longitude	
Calegory	Category				Start E		
Item	DWR UCI	P LMA Respo	nsibility	39.52382	29°	39.523829°	
пеш				-121.70629	90°	-121.706290°	
DWR ID 16405							
Comment Code							

Inspector Comment

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM

Photo 1 of 3: UCIP_FA_2018_52121_67094.jpg



Overview looking south from left levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)	
LM End	3.59	Issue Type +	Ма	Location *			
Category				GPS La	atitud	le/Longitude	
Calegory	gory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5238	29°	39.523829 °	
пеш				-121.7062	90°	-121.706290 °	
DWR ID	16405						
	Comment Code						

Inspector Comment

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM

Photo 2 of 3: UCIP_FA_2018_52121_67095.jpg



Flap gate submerged in water on WS of levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.59	Rating **	М	Issue No.		920 (cont)
LM End	3.59	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.52382	9°	39.523829°
item		-121.70629	o°	-121.706290 °		
DWR ID	16405					

Inspector Comment

Comment Code

FS_ID:52121 DS_ID:16405 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation.

FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]
FS Date: 6/7/2017 12:58:12 PM

Photo 3 of 3: UCIP_FA_2018_52121_67096.jpg



View of flap gate submerged on WS toe.

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

C : Corrected

A/W : Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.		Issue No.		Issue No.		921
LM End	3.65	Issue Type +	Ma	Location *						
Category				GPS Latitude/Longitude						
Category			Start		End					
ltom	DWR UCI	P LMA Respo	onsibility	39.5235	56°	39.523556°				
Item			-121.70534	40 °	-121.705340°					
DWR ID	16848									

Inspector Comment

Comment Code

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)
LM End	3.65	Issue Type +	Ma	Location *	



Overview looking south on left levee

Photo 2 of 3: UCIP_FA_2018_52122_67103.jpg



Headwall and flap gate located on WS.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.		921 (cont)
LM End	3.65	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52355	6°	39.523556°
пеш				-121.70534	0°	-121.705340°
DWR ID	16848					·

Inspector Comment

Comment Code

FS_ID:52122 DS_ID:16848 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

Photo 3 of 3: UCIP_FA_2018_52122_67101.jpg



Headwall and screw gate located on LS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		922
LM End	3.83	Issue Type +	Ма	Location *		
Supplemental				GPS Latitude/Longitude		
Category			Start		End	
Itom	DWR UCI	P LMA Respo	onsibility	39.5243	50°	39.524350°
Item			-121.70218	30°	-121.702180°	
DWR ID	16847					

Inspector Comment

Comment Code

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 6/7/2017 1:24:40 PM



Overview looking south on left levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.		922 (cont)
LM End	3.83	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.5243	50°	39.524350°
item			-121.7021	30°	-121.702180 °	
DWR ID	16847					

Inspector Comment

Comment Code

FS ID:52123 DS_ID:16847 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log. 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM



Headwall and flap gate located on WS toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.83	Rating **	М	Issue No.	922 (cont)		
LM End	3.83	Issue Type +	Ма	Location *			
Category				GPS La	titud	le/Longitude	
Calegory	Category					End	
Item	DWR UCI	P LMA Respo	nsibility	39.5243	50°	39.524350°	
пеш				-121.7021	80°	-121.702180 °	
DWR ID	16847						
	Comment Code						

Inspector Comment

FS_ID:52123 DS_ID:16847 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 6/7/2017 1:24:40 PM

Photo 3 of 3: UCIP_FA_2018_52123_67110.jpg



View of channel at crossing looking D/S.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	3.84	Rating **	С	Issue No.		66		
LM End	3.84	Issue Type +	Ma	Location *		LS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category						End		
Item	Crown Su	rface / Depres	ssions /	39.5244	67°	39.524467°		
item	Rutting			-121.701878°		-121.701878°		
DWR ID	DWR_MA0	013_02_s _ 201	18_66					
		Comn	nent Coc	de				
C1 : Add a above the			re-grade	the levee	to br	ing the crown		
		Inspecto	or Comm	nent				
The crown roadway was re-graveled this summer.								

No Photos

LM Start	4.04	Rating **	М	Issue No.		911			
LM End	4.78	Issue Type +	En	Location *	WS				
Category	evee	GPS La	atitud	e/Longitude					
Calegory				Start		End			
Item	Encroachi	ments		39.5266	53°	39.534091 °			
пеш				-121.6996	675°	-121.690404°			
DWR ID DWR_MA0013_02_s _ 2012_911									
		Comn	nent Cod	de					
DT : Ditch									
			_						
		Inspecto	or Comm	nent					



View of agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.17	Rating **	М	Issue No.		923			
LM End	4.17	Issue Type +	Ma	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.5282	10°	39.528210°			
item				-121.6984	10°	-121.698410 °			
DWR ID	16846				·				

Comment Code

Inspector Comment

FS_ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

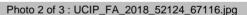
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM

LM Start	4.17	Rating **	М	Issue No.	923 (cont)
LM End	4.17	Issue Type +	Ma	Location *	



Overview looking east on right bank of Cottonwood





Unable to determine condition of flap gate on WS due to high water.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: Corrected AW: Acceptable but Monitor & Maintain

** Rating

A: Acceptable C: Corrected Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.17	Rating **	М	Issue No.		923 (cont)
LM End	4.17	Issue Type +	Ма	Location *		
Category	Suppleme	tal GPS Latitude/Longitude				e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5282	0°	39.528210°
пеш				-121.6984	0°	-121.698410°
DWR ID	16846					

Inspector Comment

Comment Code

FS ID:52124 DS_ID:16846 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard-AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM

Photo 3 of 3: UCIP_FA_2018_52124_67113.jpg



Overview of LS screw gate and concrete sump structure.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.	924		
LM End	4.65	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5325	10°	39.532510°	
пеш				-121.6913	40°	-121.691340°	
DWR ID 16845							
Comment Code							

Inspector Comment

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope

has been cleared of vegetation and is in good condition.4/19/2012
Limited inspection due to dense vegetation on WS slope. Need photos
of clear WS slope.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe
through the levee, 5.6 feet below the crown. Flap gate on the waterside

(WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls

on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)
LM End	4.65	Issue Type +	Ma	Location *	



Overview looking east on right levee of Gold Run Creek (referred to Unit 2 of Cherokee Canal).

Photo 2 of 3: UCIP_FA_2018_52125_67122.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.		924 (cont)	
LM End	4.65	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.53251	o°	39.532510	0
пеш				-121.69134	o°	-121.691340	0
DWR ID	16845						

Inspector Comment

Comment Code

FS_ID:52125 DS_ID:16845 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope

has been cleared of vegetation and is in good condition.4/19/2012
Limited inspection due to dense vegetation on WS slope. Need photos
of clear WS slope.
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe
through the levee, 5.6 feet below the crown. Flap gate on the waterside
(WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls

on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

Photo 3 of 3: UCIP_FA_2018_52125_67123.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.	925		
LM End	5.01	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.5262	98°	39.526298°	
пеш				-121.6883	20°	-121.688320°	
DWR ID 16395							
Comment Code							

Inspector Comment

FS_ID:52126 DS_ID:16395 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]

FS Date: 6/7/2017 1:54:08 PM

LM Start	5.01	Rating **	A/W	Issue No.	925 (cont)
LM End	5.01	Issue Type +	Ma	Location *	



Overview looking west on the left levee of Cottonwood

Photo 2 of 3: UCIP_FA_2018_52126_67129.jpg



Headwall and flap gate located on WS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.		925 (cont)	
LM End	5.01	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5262	98°	39.526298	0
item				-121.6883	20°	-121.688320	0
DWR ID 16395							
		Comn	nent Coc	le			

Inspector Comment

FS_ID:52126 DS_ID:16395 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]

FS Date: 6/7/2017 1:54:08 PM

Photo 3 of 3: UCIP_FA_2018_52126_67126.jpg



View of channel at crossing.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		926	
LM End	5.09	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.52691	7°	39.526917°	
item				-121.68934	10°	-121.689340°	
DWR ID	16408						

Inspector Comment

Comment Code

FS_ID:52129 DS_ID:16408 EP_NO: N/A

gate on LS.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

LM Start	5.09	Rating **	A/W	Issue No.	926 (cont)
LM End	5.09	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking west.



Photo 2 of 3: UCIP_FA_2018_52129_67140.jp

Headwall and flap gate located on WS.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.		926 (cont)
LM End	5.09	Issue Type +	Ma	Location *		
Supplemental				GPS La	tituc	le/Longitude
Category				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5269 ²	17°	39.526917°
item			-121.68934	40 °	-121.689340°	
DWR ID	16408					

Inspector Comment

Comment Code

FS_ID:52129 DS_ID:16408 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken gate on LS.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

Photo 3 of 3: UCIP_FA_2018_52129_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927
LM End	5.29	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52595	8°	39.525958°
пеш				-121.69273	30°	-121.692730°
DWR ID	16409					· · · · · · · · · · · · · · · · · · ·

Inspector Comment

Comment Code

FS ID:52130 DS_ID:16409 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 6/7/2017 2:02:27 PM

LM Start	5.29	Rating **	М	Issue No.	927 (cont)
LM End	5.29	Issue Type +	Ma	Location *	



Overview of crossing looking downstream.

Photo 2 of 3: UCIP_FA_2018_52130_67149.jpg



View of WS headwall with dense vegetation in channel.

Location + Issue Type LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Ma: Maintenance Deficiency WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.29	Rating **	М	Issue No.		927 (cont)
LM End	5.29	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	tuc	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.52595	8°	39.525958°
пеш				-121.69273	o°	-121.692730 °
DWR ID	16409					·

Comment Code

Inspector Comment FS ID:52130

DS_ID:16409 EP_NO: N/A Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 6/7/2017 2:02:27 PM

Photo 3 of 3: UCIP_FA_2018_52130_67148.jpg



Headwall and flap gate located on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.36	Rating **	М	Issue No.	928		
LM End	5.36	Issue Type +	En	Location *			
Category	ental	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		39.5253	61 °	39.525361 °	
item				-121.6936	30°	-121.693630°	
DWR ID 16410							
Comment Code							

Inspector Comment

FS_ID:52131 DS_ID:16410 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard- AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]

FS Date: 6/7/2017 2:04:03 PM

LM Start	5.36	Rating **	М	Issue No.	928 (cont)	
LM End	5.36	Issue Type +	En	Location *		



Overview of site



Capped irrigation pipe located on water side of levee

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.36	Rating **	М	Issue No.	928 (cont)		
LM End	5.36	Issue Type +	En	Location *			
Catagony	Suppleme	ental	GPS La	tituc	le/Longitude		
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.5253	61 °	39.525361 °	
item				-121.6936	30°	-121.693630°	
DWR ID 16410							
Comment Code							

Inspector Comment

FS_ID:52131 DS_ID:16410 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard- AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.

FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]

FS Date: 6/7/2017 2:04:03 PM



View of LS toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.80	Rating **	М	Issue No. 929		929	
LM End	5.80	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCI	P Field Study		39.5233	81 °	39.523381 °	
item		-121.7012	70°	-121.701270°			
DWR ID	DWR ID 16411						
Comment Code							

Inspector Comment

FS_ID:52132 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were

submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.

(DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR

USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]

FS Date: 6/7/2017 2:06:17 PM



Overview looking south

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.80 Rating ** M		Issue No.		929 (cont)			
LM End	5.80	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	DWR UC	P Field Study		39.5233	81 °	39.523381 °		
пеш			-121.7012	70°	-121.701270°			
DWR ID 16411								
	Comment Code							

Inspector Comment

FS_ID:52132 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition.

(DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS.

(DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana)

Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]

FS Date: 6/7/2017 2:06:17 PM

Photo 2 of 3: UCIP_FA_2018_52132_67157.jpg



Headwall and flap gate on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	5.80 Rating ** M Iss		Issue No.	929 (cont)				
LM End	5.80	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Category				Start		End		
ltom	DWR UCI	IP Field Study		39.52338	81 °	39.523381	0	
пеш	Item				o°	-121.701270	0	
DWR ID 16411								
	Comment Code							

Inspector Comment

FS_ID:52132 DS_ID:16411 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends were underwater but it appears that the LS slide gate is still missing. (DWR Sutter Yard-

AFreitag)11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP -

omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection.

(DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection.

(DWR Sutter Yard - afreitag)//03/2013 Saline as last hispection.

(DWR Sutter Yard - afreitag)/4/24/2012 Slide gate missing on LS.

Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR

Sutter Yard - omagana)

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]

FS Date: 6/7/2017 2:06:17 PM

Photo 3 of 3: UCIP_FA_2018_52132_67156.jpg



Headwall and damaged/missing screw gate on LS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	6.18	Rating **	М	Issue No.		12			
LM End	7.54	Issue Type +	En	Location *		LS			
Category	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End			
Item	Encroachi	ments		39.5208	43°	39.502958°			
пеш				-121.7063	45°	-121.716953°			
DWR ID DWR_MA0013_02_s _ 2012_12									
Comment Code									
DT : Ditch									
	Inspector Comment								



View of the agricultural ditch along the toe.

Rating ** Issue No. 7.18 М 930 LM Start Issue Type + Location * LM End 7.18 Supplemental GPS Latitude/Longitude Category Start Fnd DWR UCIP Field Study 39.507570° 39.507570° Item -121.713870° -121.713870° 17518 DWR ID

Comment Code

Inspector Comment

FS_ID:52139 DS_ID:17518 EP_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/5/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/29/2014 Same as last inspection.12/9/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate.4/24/2012 Not found - Need to verify if there are any signs of the structure during part inspection when slopes are closed. If not

the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure. FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee embankment, unknown depth below the crown. (Permit No. 5200B, 1967 - Richvale Irrigation District) Additional permits related to this structure include Permit No. 5200 and 5200A.

FS Date: 6/7/2017 2:31:24 PM

No Photos

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		931	
LM End	8.30	Issue Type +	En	Location *			
Category	Suppleme	GPS La	atitud	le/Longitude			
Category				Start		End	
Item	DWR UCI	P Field Study		39.4938	50°	39.493850°	
item				-121.7247	80°	-121.724780°	
DWR ID	16413						

Inspector Comment

Comment Code

FS_ID:52140 DS_ID:16413 EP_NO: 14704

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing is in good condition. Unusre on the permit issues below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: Steel fiber optic cable through the levee, approximately 3.5 feet below the crown. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704, 1987 - Sprint) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/7/2017 2:34:57 PM

LM Start	8.30	Rating **	М	Issue No.	931 (cont)
LM End	8.30	Issue Type +	En	Location *	



Buried cable box located on the LS edge.



WS view cable line attached to highway bridge.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	8.30	Rating **	М	Issue No.		932	
LM End	8.30	Issue Type +	En	Location *			
Category				GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.4937	80°	39.493780°	
item				-121.7248	40 °	-121.724840 °	
DWR ID	16404						
Comment Code							

Inspector Comment

FS_ID:52141 DS_ID:16404 EP_NO: 10589A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below.11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent.5/29/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).

FIELD_STRUCT_DESC: 4-inch steel communication pipe, contains three telephone cables, through the levee, approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589, 1987 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 6/7/2017 2:37:34 PM

LM Start	8.30	Rating **	М	Issue No.	932 (cont)
LM End	8.30	Issue Type +	En	Location *	



Buried cable box located on the landside edge.



Waterside view of utility line alignment through levee then attached to bridge.

*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.		933	
LM End	9.56	Issue Type +	Ма	Location *			
Category	Suppleme	GPS La	atitud	le/Longitude			
Calegory	Category					End	
Itom	DWR UCI	P LMA Respo	nsibility	39.4774	38°	39.477438	0
Item				-121.735200°		-121.735200	0
DWR ID	16838						

Comment Code

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)
LM End	9.56	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.



View of crossing looking from channel towards WS levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.		933 (cont)		
LM End	9.56	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.4774	38°	39.477438°		
item				-121.73520	00°	-121.735200°		
DWR ID	16838							
Comment Code								

Inspector Comment

FS_ID:52145 DS_ID:16838 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM



WS view-access well located 60 feet from WS toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.		934	
LM End	9.57	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.4773	35 °	39.477335°	
пеш				-121.7353	40°	-121.735340°	
DWR ID	16839						
Comment Code							

Inspector Comment

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)]
FS Date: 6/8/2017 8:20:37 AM

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)
LM End	9.57	Issue Type +	Ма	Location *	

Photo 1 of 3 : UCIP_FA_2018_52146_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

Photo 2 of 3: UCIP_FA_2018_52146_67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)			
LM End	9.57	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start	End			
Item	DWR UCI	P LMA Respo	nsibility	39.47733	35 °	39.477335°		
пеш				-121.73534	10°	-121.735340°		
DWR ID 16839								
Comment Code								

Inspector Comment

FS_ID:52146 DS_ID:16839 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.68)] FS Date: 6/8/2017 8:20:37 AM

Photo 3 of 3: UCIP_FA_2018_52146_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.66	Rating **	М	Issue No.		935		
LM End	9.66	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.4762	60°	39.476260°		
item	item					-121.736230°		
DWR ID 18912								

Comment Code

Inspector Comment

FS ID:52148 DS_ID:18912 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD STRUCT DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:23:22 AM

LM Start	9.66	Rating **	М	Issue No.	935 (cont)
LM End	9.66	Issue Type +	En	Location *	



Overview of levee crown at crossing.



Marker for buried fiber optic cable on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.66	Rating **	М	Issue No.		935 (cont)	
LM End	9.66	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.47626	0°	39.476260	0
пеш				-121.73623	0°	-121.736230	0
DWR ID	18912						

Inspector Comment

Comment Code

FS_ID:52148 DS_ID:18912 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.

FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:23:22 AM

Photo 3 of 3: UCIP_FA_2018_52148_67290.jpg



Marker for buried fiber optic cable on LS with contact information.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.67	Rating **	М	Issue No.		936	
LM End	9.67	Issue Type +	En	Location *			
Category	ental	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.4761	40°	39.476140°	
item			-121.7363	90°	-121.736390°		
DWR ID 18913							

Comment Code

Inspector Comment

FS_ID:52149 DS_ID:18913 EP_NO: N/A

Repair Type: Non-Urgent
Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspeciton submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch high pressure line bored through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email veok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:34:40 AM

LM Start	9.67	Rating **	М	Issue No.	936 (cont)
LM End	9.67	Issue Type +	En	Location *	



Overview of levee crown at crossing.

Photo 2 of 3: UCIP_FA_2018_52149_67294.jpg



WS marker with utility contact information.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.67	Rating **	М	Issue No.	936 (cont)		
LM End	9.67	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.4761	40°	39.476140°	
item				-121.7363	90°	-121.736390°	
DWR ID 18913							
Comment Code							

Inspector Comment

FS_ID:52149 DS_ID:18913 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/9/2013 Same as last inspection.4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspeciton submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates. FIELD_STRUCT_DESC: 8-inch high pressure line bored through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email veok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012. FS Date: 6/8/2017 8:34:40 AM



View of LS slope and marker.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.69	Rating **	М	Issue No.		937	
LM End	9.69	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory						End	
Item	DWR UC	P Field Study		39.47596	° 0	39.475960°	
пеш				-121.73654	o°	-121.736540°	
DWR ID	18914						
	Comment Code						

Inspector Comment

FS_ID:52150 DS_ID:18914 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last

inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing.

FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:42:12 AM

LM Start	9.69	Rating **	М	Issue No.	937 (cont)
LM End	9.69	Issue Type +	En	Location *	



Overview of levee crown at crossing.



Marker located on LS.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.69	Rating **	М	Issue No.		937 (cont)	
LM End	9.69	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.47596	0°	39.475960	٥
пеш				-121.73654	0°	-121.736540	٥
DWR ID	18914						

Inspector Comment

Comment Code

FS_ID:52150 DS_ID:18914 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013

Same as last inspection.7/09/2013 Same as last

inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing.

FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.

FS Date: 6/8/2017 8:42:12 AM

Photo 3 of 3: UCIP_FA_2018_52150_67298.jpg



Underground cable marker with contact information.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	9.88	Rating **	М	Issue No.		938
LM End	9.88	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.47341	10°	39.473410°
пеш				-121.73819	90°	-121.738190°
DWR ID	17731					

Comment Code

Inspector Comment

FS ID:52151 DS_ID:17731 EP_NO: 16994

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 6/5/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate any signs of this crossing.4/24/2012 Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection.

FIELD_STRUCT_DESC: 10-inch high-density polyethylene (HDPE) communication conduit through the levee, unknown depth below the crown. Conduit contains fiber-optic cables that goes across and under (bored) Cherokee Canal and its levees. Twelve inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994, 2000 - Level 3 Comm)

FS Date: 6/8/2017 8:43:47 AM

Photo 1 of 1: FA_2018_MA0013_301_13_20180905_00005.jpg

No Photos

LM Start	10.03	Rating **	M	Issue No.		13		
LM End	10.52	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		39.4715	17°	39.465113°		
пеш				-121.7394	33°	-121.743592°		
DWR ID DWR_MA0013_02_s _ 2012_13								
		Comn	nent Coc	le				
T : Ditch								
		Inspecto	or Comm	ent				



View of the agricultural ditch along the toe.

Location LS: Land Side N/A: Not Applicable WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	10.56	Rating **	М	Issue No.		939
LM End	10.56	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitud		e/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		39.4645	90°	39.464590°
пеш				-121.7439	10°	-121.743910°
DWR ID	16472					

Comment Code

Inspector Comment

FS_ID:52153 DS_ID:16472 EP_NO: 10939

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 6/5/2017 Pole still present. (DWR Sutter Yard-AFreitag)11/17/2016 Pole still present within channel. (DWR Sutter Yard-AFreitag)4/26/2016 Pole within the channel not removed per permit description.6/30/2015 same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last

inspection.7/08/2013 Same as last inspection.4/24/2012 According to permit the existing pole and buried cable in the overflow area were to

be removed. Pole is present in the channel.

FIELD_STRUCT_DESC: Reroute a buried wire across the left bank levee of Cherokee Canal at State Highway 162 Bridge abutment from that point to the downstream side of the bridge. From there the wire extends to the gaging station at the center of the bridge. The facility maintains service to the Department of Water Resources' Metering Station midspan of the bridge. (Permit No. 10939, 1976 - Pacific Telephone and Telegraph Company [PT&T])

FS Date: 6/8/2017 8:52:41 AM

Photo 1 of 1: UCIP_FA_2018_52153_67334.jpg



Pole within the channel was not removed.

LM Start	10.59	Rating **	М	Issue No.		18	
LM End	11.66	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category	Category					End	
Item	Encroach	Encroachments			05 °	39.450333°	
пеш				-121.7441	72 °	-121.753157°	
DWR ID	DWR_MA0	013_02_s _ 201	12_18				
		Comn	nent Cod	de			
DT : Ditch							

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_301_18_20180905_00006.jpg



View of the agricultural ditch along the toe.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated Ma: Mainte Ob: Design Cn: Crown

** Rating
A: Acceptable N: Not Inspected/Rated Ma: Mainte Ob: Design Cn: Corrected U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforce

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940
LM End	12.88	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start	End	
Item	DWR UCI	P LMA Respo	nsibility	39.4347	79°	39.434779°
item				-121.7639	40°	-121.763940°
DWR ID	16385					
Comment Code						

Inspector Comment

FS ID:52154 DS ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal

CR: Crown

Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940 (cont)	
LM End	12.88	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.4347	79°	39.434779°	
item				-121.7639	40°	-121.763940°	
DWR ID	16385						
Comment Code							

Inspector Comment

FS_ID:52154 DS_ID:16385 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]
FS Date: 6/8/2017 8:57:36 AM

Photo 2 of 3: UCIP_FA_2018_52154_67337.jpg



Stand pipe with screw gate WS

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	12.88	Rating **	М	Issue No.		940 (cont)
LM End	12.88	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	le/Longitude	
Calegory				Start		End
Item	DWR UC	P LMA Respo	nsibility	39.434779°		39.434779°
пеш				-121.76394	40 °	-121.763940°
DWR ID	16385					
Comment Code						

Inspector Comment

FS ID:52154 DS_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection, 12/4/2013 Same as last inspection, 7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of

FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM

Photo 3 of 3: UCIP_FA_2018_52154_67335.jpg



View of the inside of the WS stand pipe. No obstructions blocking slide gate.

CR: Crown

Ma: Maintenance Deficiency Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	13.40	Rating **	M	Issue No.		19		
LM End	16.00	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End		
Encroachments ltem			39.4281	92°	39.414202°			
пеш				-121.768443 ° -121.78				
DWR ID DWR_MA0013_02_s _ 2012_19								
Comment Code								
DT : Ditch								
		Inspecto	or Comm	nent				

Photo 1 of 1 : FA_2018_MA0013_301_19_20180905_00007.jpg



View of the agricultural ditch along the toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941
LM End	15.44	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS La	le/Longitude		
Calegory				Start		End
Item	DWR UC	P LMA Respo	nsibility	39.4192	09°	39.419209°
item				-121.7736	80°	-121.773680 °
DWR ID	16376					
Comment Code						

Inspector Comment

FS_ID:52156 DS_ID:16376 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941 (cont)
LM End	15.44	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Itom	DWR UCI	P LMA Respo	onsibility	39.41920	9°	39.419209°
пеш	Item		-121.77368	°	-121.773680°	
DWR ID	16376					

Inspector Comment

Comment Code

FS ID:52156 DS_ID:16376 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by vegetation.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

+ Issue Type

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.44	Rating **	М	Issue No.		941 (cont)
LM End	15.44	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.41920	9°	39.419209°
пеш				-121.77368	o°	-121.773680°
DWR ID	16376					

Inspector Comment

Comment Code

FS_ID:52156 DS_ID:16376 EP_NO: N/A

vegetation.

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall.4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0011 for WS gate blocked by

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



View of WS headwall and flap gate.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		942
LM End	15.68	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.417043°		39.417043°
item				-121.777240 °		-121.777240°
DWR ID	16382					·

Comment Code

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

LM Start	15.68	Rating **	М	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	



Overview of crossing looking downstream of the left bank of Cherokee



View of WS slope. Limited inspection due to the dense vegetation.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.68	Rating **	М	Issue No.		942 (cont)
LM End	15.68	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.417043°		39.417043°
пеш				-121.7772	40°	-121.777240°
DWR ID	16382					
Comment Code						

Inspector Comment

FS_ID:52157 DS_ID:16382 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue.

FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

Photo 3 of 3 : UCIP_FA_2018_52157_67350.jpg



View of WS headwall.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	15.98	Rating **	С	Issue No.		64		
LM End	15.98	Issue Type +	Ma	Location *		LS		
Earthen Levee			GPS La	atitud	e/Longitude			
Category			Start		End			
Itom	Animal Control			39.414397°		39.414397°		
Item		-121.781596°		-121.781596°				
DWR ID	DWR_MA0	013_02_f _ 201	6_64					
		Comn	nent Coc	le				
	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
	Inspector Comment							

The rodent holes were repaired along the landside slope.

No Photos

16.02 Issue No. Rating ** Μ 65 LM Start 16.02 Issue Type + Location * LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.414021° 39.414021 ° Item -121.782199° -121.782199° DWR_MA0013_02_f _ 2016_65 DWR ID Comment Code DE: Debris Inspector Comment

No Photos

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		943	
LM End	16.07	Issue Type +	En	Location *			
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
Item	DWR UCIP Field Study			39.413595°		39.413595°	
item				-121.782890 °		-121.782890 °	
DWR ID	16377						
	Comment Code						

Inspector Comment

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 6/8/2017 9:41:12 AM



Overview of levee crown.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.	943 (cont)		
LM End	16.07	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.413595°		39.413595°	
item				-121.782890 °		-121.782890°	
DWR ID	16377						
Comment Code							

Inspector Comment

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 6/8/2017 9:41:12 AM



Appurtances on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.07	Rating **	М	Issue No.		943 (cont)	
LM End	16.07	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			39.4135	95 °	39.413595°	
item				-121.78289	90°	-121.782890 °	
DWR ID	16377						

Inspector Comment

Comment Code

FS_ID:52158 DS_ID:16377 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS headwall was mostly buried and pipe end over 50% full of sediemnt. WS distribution box appears to have not been repaired yet but it does not seem to affect the integrity of the levee. (DWR Sutter Yard- AFreitag)11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed.

5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit.

FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]

FS Date: 6/8/2017 9:41:12 AM



WS view of crossing.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.52	Rating **	М	Issue No.	54		
LM End	16.52	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Animal Co	nimal Control			648°	39.409548°	
item				-121.7896	68°	-121.789668 °	
DWR ID	DWR_MA0	013_02_f _ 201	4_54				
		Comn	nent Cod	de			
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
	Inspector Comment						



View of the rodent holes along the waterside slope.

LM Start	16.86	Rating **	M	Issue No.		944	
LM End	16.86	Issue Type +	En	Location *			
Catagory	Supplemental			GPS La	titud	e/Longitude	
Calegory	Category		Start		End		
Item	DWR UCI	P Field Study		39.4064	10°	39.406410	0
пеш				-121.79460	00°	-121.794600	0
DWR ID	16841						

Comment Code

Inspector Comment

FS_ID:52159 DS_ID:16841 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 5/30/2017 Unable to locate. (DWR Sutter Yard-AFreitag)11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/26/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to

locate.7/08/2013 Same as last inspection. Unable to

locate.4/24/2012 Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection.

FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee at approximately 14.5 feet below the crown. Flap gate located on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.06)]

FS Date: 6/8/2017 9:59:36 AM

No Photos

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	16.89	Rating **	М	Issue No.		20		
LM End	18.72	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		39.4062	17°	39.389187°		
item				-121.794945 °		-121.821233°		
DWR ID DWR_MA0013_02_s _ 2012_20								
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				



View of the agricultural ditch along the toe.

Issue No. 17.41 Rating ** Ν 67 LM Start 17.41 Issue Type + Location * LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 39.401331° 39.401331 ° Item -121.802480 ° -121.802480 ° DWR_MA0013_02_f _ 2016_67 DWR ID Comment Code

T5 : Tree stumps.

Inspector Comment

Approximately eight stumps on the landside toe.

No Photos

LM Start	17.64	Rating **	М	Issue No.		69		
LM End	17.64	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee					le/Longitude		
Category				Start		End		
Item	Slope Sta	bility		39.3991	64°	39.399164°		
itom				-121.805787 °		-121.805787 °		
DWR ID	DWR_MA0	013_02_f _ 201	6_69					
		Comn	nent Cod	de				
S1 : Repai	ir slope ins	tability.						
Inspector Comment								



Photo 1 of 1: FA_2018_MA0013_301_69_20180905_00018.jpg

View of slope instability issue along the landside slope.

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	17.90	Rating **	М	Issue No.		70	
LM End	17.90	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		39.3968	° 908	39.396809°	
item				-121.8094	22°	-121.809422°	
DWR ID DWR_MA0013_02_f _ 2016_70							
		Comn	nent Cod	de			
A3 : No roccompact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and	
		Inspecto	or Comm	nent			

Photo 1 of 1: FA_2018_MA0013_301_70_20180905_00019.jpg

View of the rodent holes along the landside slope.

LM Start	17.93	Rating **	М	Issue No.		71
LM End	17.93	Issue Type +	Ma	Location *		LS
Category	Earthen L	GPS La	titud	le/Longitude		
Calegory			Start		End	
Item	Animal Co	ontrol	39.3964	65 °	39.396465°	
пеш				-121.8099	35°	-121.809935 °
DWR ID	DWR_MA0	013_02_f _ 201	6_71			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_301_71_20180905_00020.jpg



View of the rodent holes along the landside slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		945	
LM End	18.16	Issue Type +	Ma	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.3944	06 °	39.394406°	
пеш				-121.8131	80°	-121.813180°	
DWR ID 16379							
	Comment Code						

Inspector Comment

FS_ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still present WS. LS side was underwater during inspection.5/28/2014 Same as last

inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)]

FS Date: 6/8/2017 10:18:47 AM

LM Start	18.16	Rating **	A/W	Issue No.	945 (cont)
LM End	18.16	Issue Type +	Ma	Location *	



Photo 1 of 3: UCIP_FA_2018_52161_67387.jpg

Overview of crossing looking D/S at left bank of Cherokee Canal.



View of WS slope and berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.		945 (cont)	
LM End	18.16	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.39440)6°	39.394406°	
пеш				-121.81318	80°	-121.813180°	
DWR ID	16379						

Inspector Comment

Comment Code

FS ID:52161 DS_ID:16379 EP_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still presenton WS. LS side was

underwater during inspection.5/28/2014 Same as last

inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe

through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)]

FS Date: 6/8/2017 10:18:47 AM

Photo 3 of 3: UCIP_FA_2018_521	161_67390.jpg
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View of flap gate located on WS.

LM Start	19.37	Rating **	М	Issue No.		21	
LM End	19.92	Issue Type +	En	Location *		LS	
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Encroach	ments		39.3832	52°	39.378192°	
пеш	item			-121.8305	65 °	-121.838543 °	
DWR ID DWR_MA0013_02_s _ 2012_21							
Comment Code							

DT: Ditch

Inspector Comment

Photo 1 of 1: FA_2018_MA0013_301_21_20180905_00009.jpg



View of the agricultural ditch along the toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.		946
LM End	19.92	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP LMA Responsibility			39.37819	8 °	39.378198°
item				-121.83857	o°	-121.838570°
DWR ID	16375					

Inspector Comment

Comment Code

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

LM Start	19.92	Rating ** M		Issue No.	946 (cont)
LM End	19.92	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52164_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 3: UCIP_FA_2018_52164_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	19.92	Rating **	М	Issue No.	946 (cont		
LM End	19.92	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.378198	°	39.378198	0
item		-121.838570	°	-121.838570	0		
DWR ID	16375						

Inspector Comment

Comment Code

FS_ID:52164 DS_ID:16375 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

Photo 3 of 3: UCIP_FA_2018_52164_67402.jpg



Flap gate located on the WS.

LM Start	20.43	Rating **	М	Issue No.		6
LM End	20.74	Issue Type +	Ма	Location *	LS	
Catagoria Earthen Levee			GPS Latitude/Longitude			
Calegory	Category		Start		End	
ltom	Trim / Thi	n Trees		39.37309	1°	39.370795 °
item	Item			-121.84522	5°	-121.850124°
DWR ID DWR_MA0013_02_s _ 2013_6						
Comment Code						

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



View of the overgrown trees along the landside slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating

A : Acceptable
N : Not Inspected/Rated
M : Maintenance Deficiency
Ob : Design & System Obsolescence
U : Unacceptable
A/W : Acceptable but Monitor & Maintain
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.52	Rating **	М	Issue No.		73	
LM End	20.52	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee					e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		39.3724	86°	39.372486 °	
пеш				-121.846537°		-121.846537 °	
DWR ID	DWR_MA0	013_02_f _ 201	6_73				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove th	Remove the tree limbs from the landside slope and toe.						

Photo 1 of 1: FA_2018_MA0013_301_73_20180905_00021.jpg

View of the tree limbs along the landside levee toe.

LM Start	20.65	Rating **	М	Issue No.		52	
LM End	20.65	Issue Type +	Ma	Location *	LS		
Catagon Earthen Levee GPS Latitude/Longitude							
Category Start End							
Item	Encroach	ments		39.3714	33°	39.371433°	
item				-121.8487	53°	-121.848753 °	
DWR ID DWR_MA0013_02_s _ 2014_52							
Comment Code							

TR: Tree or limb

Inspector Comment

Remove the tree limbs from the landside slope and toe.



View of the tree limbs along the landside toe.

LM Start	20.74	Rating **	N	Issue No.	74			
LM End	20.74	Issue Type +	Ma	Location *		LS		
Category	Earthen L	GPS La	atituc	de/Longitude				
Category				Start		End		
Item	Trim / Thi	rim / Thin Trees			'96 °	39.370796	0	
пеш				-121.8501	24 °	-121.850124	0	
DWR ID	DWR_MA0	013_02_f _ 201	6_74					
		Comn	nent Cod	de				
T5 : Tree s	T5 : Tree stumps.							
	Inspector Comment							

No Photos

* Location

LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.	947		
LM End	20.76	Issue Type +	En	Location *			
Category	atitud	le/Longitude					
Calegory	Start End						
Item	DWR UCI	P Field Study		39.3706	76°	39.370676°	
item				-121.8504	90°	-121.850490 °	
DWR ID 16383							
	Comment Code						

Inspector Comment

FS_ID:53320 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard -AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired: will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD STRUCT DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 8/23/2018 9:41:00 AM



Corrugated metal pipe risers with slide gates located on WS slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		947 (cont)
LM End	20.76	Issue Type +	En	Location *		
Category	Supplemental				titud	e/Longitude
Calegory		Start		End		
Item	DWR UCI	P Field Study		39.3706	76°	39.370676°
item				-121.85049	90°	-121.850490°
DWR ID 16383						

Inspector Comment

Comment Code

FS_ID:53320 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard -AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired: will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD STRUCT DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 8/23/2018 9:41:00 AM



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		947 (cont)	
LM End	20.76	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.3706	76°	39.370676°	
item				-121.8504	90°	-121.850490°	
DWR ID	16383					·	

Inspector Comment

Comment Code

FS_ID:53320 DS_ID:16383 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard -AFreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard -AFreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/8/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired: will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana) FIELD STRUCT DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 8/23/2018 9:41:00 AM



Sink hole observed behind WS headwall at the downstream edge of headwall. (Sink hole picture 1 of 2)

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		948
LM End	20.76	Issue Type +	En	Location *		
Category	Supplemental				atitud	le/Longitude
Calegory		Start		End		
Item	DWR UCI	P Field Study		39.3706	79°	39.370679°
item				-121.8505	00°	-121.850500°
DWR ID 17014						

Inspector Comment

Comment Code

FS_ID:53321 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in

reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]



WS view of corrugated metal pipe risers .

FS Date: 8/23/2018 9:50:00 AM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		948 (cont)	
LM End	20.76	Issue Type +	En	Location *			
Category				GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltom	DWR UCI	P Field Study		39.3706	79°	39.370679	
Item				-121.850500 °		-121.850500	
DWR ID 17014							

Comment Code

Inspector Comment

FS_ID:53321 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 8/23/2018 9:50:00 AM



Riser for pipe 2 of 3.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		948 (cont)	
LM End	20.76	Issue Type +	En	Location *			
Category	ental	GPS La	titud	e/Longitude			
Calegory	Category					End	
Itom	DWR UCI	IP Field Study		39.3706	79°	39.370679°	
Item				-121.8505	00°	-121.850500°	
DWR ID 17014							

Comment Code

Inspector Comment

FS_ID:53321 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana)

FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]

FS Date: 8/23/2018 9:50:00 AM



View of pipe 2. Pipe 2 diverts flow to pipe 1.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.		949
LM End	20.76	Issue Type +	En	Location *		
Supplemental				GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.3706	79°	39.370679
item				-121.8505	00°	-121.850500
DWR ID	17185					

Comment Code

Inspector Comment

FS_ID:53322 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]



View of corrugated metal risers located on WS.

FS Date: 8/23/2018 9:54:00 AM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.	949 (cont)			
LM End	20.76	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		39.3706	79°	39.370679°		
пеш				-121.8505	00°	-121.850500 °		
DWR ID	D 17185							
Comment Code								

Inspector Comment

FS_ID:53322 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]



View of corrugated metal pipe for pipe 3 of 3.

FS Date: 8/23/2018 9:54:00 AM

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.	949 (cont)			
LM End	20.76	Issue Type +	En	Location *				
Category	ental	GPS La	atitud	le/Longitude				
Calegory			Start		End			
Item	DWR UCI	P Field Study		39.3706	79°	39.370679		
пеш				-121.8505	00°	-121.850500		
DWR ID	VR ID 17185							
Comment Code								

Inspector Comment

FS_ID:53322 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 The CVFPB has filed an enforcement for this crossing, Enforcement Case: 2018-723. There is still massive erosion around the WS headwall and corrosion and degredation of the LS outlet pipes, so the crossing remains Urgent (D. Sanoski - DWR UCIP).5/30/2017 No repairs have been made here yet. WS still has depressions above the pipe alignment. LS pipe end still showing heavy signs of rusting and deterioration. Sediment build up inside of concrete distribution box on the LS. (DWR Sutter Yard - AFreitag)11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard afreitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal

pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE

Sacramento O&M Manual 519, June 1962 (HLM 21.00)]

FS Date: 8/23/2018 9:54:00 AM



View of Pipe 3 of 3 from WS headwall.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	20.77	Rating **	М	Issue No.		75	
LM End	20.77	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion / I	Bank Caving		39.3706	641 °	39.370641 °	
пеш				-121.8505	72°	-121.850572°	
DWR ID DWR_MA0013_02_f _ 2016_75							
		Comn	nent Cod	de			
E1 : Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			

Photo 1 of 1: FA_2018_MA0013_301_75_20180905_00022.jpg

View of the erosion along the waterside toe.

LM Start	21.03	Rating **	М	Issue No.	68				
LM End	21.03	Issue Type +	Ma	Location *	LS				
Category Earthen Levee			GPS Latitude/Longitude						
Calegory				Start		End			
Item	Animal Control			39.368682°		39.368682°			
пеш		mai Control		-121.8548	17°	-121.854817°			
DWR ID DWR_MA0013_02_s _ 2018_68									
	Comment Code								

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

Repair the rodent holes along the landside slope.

Photo 1 of 1 : FA_2018_MA0013_301_68_20180905_00017.jpg



View of the rodent holes along the landside slope.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950	
LM End	21.35	Issue Type +	Ма	Location *			
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	R UCIP LMA Responsibility		39.3661	55°	39.366155	٥
item				-121.8598	80°	-121.859880	0
DWR ID	16384						

Comment Code

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



Overview of crossing looking downstream.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.		950 (cont)		
LM End	21.35	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.3661	55 °	39.366155°		
item				-121.8598	80°	-121.859880°		
DWR ID	16384							
	Comment Code							

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



View of WS daylight. Hole present at pipe daylight.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.35	Rating **	М	Issue No.	950 (cont)			
LM End	21.35	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.36615	5°	39.366155°		
пеш				-121.85988	o°	-121.859880°		
DWR ID	16384							
	Comment Code							

Inspector Comment

FS_ID:52168 DS_ID:16384 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE_CESPK_M13E_2011_p_0234 for no WS gate but sluice gate present.

FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



WS-view of internal pipe with severe corrosion-holes present along pipe

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.		951	
LM End	21.83	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.3623	78°	39.362378°	
item				-121.8673	50°	-121.867350°	
DWR ID	16394						
		Comn	nent Cod	le			

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

LM Start	21.83	Rating **	М	Issue No.	951 (cont)
LM End	21.83	Issue Type +	Ma	Location *	



Overview of crossing looking upstream at the left bank of Cherokee Canal.



View of WS headwall.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.83	Rating **	М	Issue No.		951 (cont)
LM End	21.83	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
ltom	DWR UCI	P LMA Respo	nsibility	39.36237	B°	39.362378°
Item				-121.86735	o°	-121.867350 °
DWR ID	16394					·

Comment Code

Inspector Comment

FS_ID:52170 DS_ID:16394 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

Photo 3 of 3: UCIP_FA_2018_52170_67461.jpg



Flap gate located on WS.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.86	Rating **	М	Issue No.	952			
LM End	21.86	Issue Type +	En	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study			39.36210)3 °	39.362103°		
пеш				-121.86782	20°	-121.867820°		
DWR ID	16374							
Comment Code								

Inspector Comment

FS_ID:52172 DS_ID:16374 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

the USACE Periodic Inspection report as

UCIP Comments: 5/30/2017 Splice box still present at LS toe. (DWR Sutter Yard - AFreitag)11/17/2016 Splice box still present at LS toe. (DWR Sutter Yard - AFreitag)4/26/2016 Communication Splice box was still present. Not sure what was done to ever resolve the encroachment issue.6/30/2015 Same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 Unauthorized Encroachment. This crossing is listed multiple times in

USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve.

FIELD_STRUCT_DESC: *ILLEGAL ENCROACHMENT* Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along landside (LS) shoulder and levee crown hinge point. Levee sloughs along cable trench after heavy rains. [Additional Reference(s): DWR Levee Log, 1993]

FS Date: 6/8/2017 10:39:36 AM

Photo 1 of 1: UCIP_FA_2018_52172_67480.jpg



View of utility line located on LS toe.

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	21.87	Rating **	U	Issue No.		59		
LM End	22.09	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Encroachments			39.3620	22°	39.360294°		
item				-121.8679	49°	-121.871339°		
DWR ID	DWR ID DWR_MA0013_02_s _ 2016_59							
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				

No Photos

LM Start	22.07	Rating **	М	Issue No.		4		
LM End	22.13	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Category			Start		End			
Item	Vegetation			39.3604	10°	39.359920°		
пеш				-121.871125°		° -121.872067°		
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_4							
		Comn	nent Cod	de				
V6 : Lands	scaping							
Inspector Comment								



View of landscaping along the toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.		953
LM End	22.15	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.35982	7°	39.359827°
item				-121.87230	0°	-121.872300°
DWR ID	16391					·

Comment Code

Inspector Comment

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

LM Start	22.15	Rating **	М	Issue No.	953 (cont)
LM End	22.15	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_52175_67498.jpg



View of WS slope looking from WS headwall to levee crown.

Photo 2 of 3: UCIP_FA_2018_52175_67496.jpg



View of WS slope looking from WS headwall to levee crown.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Maintanance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	22.15	Rating **	М	Issue No.	953 (cont)		
LM End	22.15	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	tud	e/Longitude	
Category				Start		End	
ltom	DWR UCI	IP LMA Respo	nsibility	39.35982	7 °	39.359827	0
Item				-121.87230) °	-121.872300	0
DWR ID	16391						

Comment Code

Inspector Comment

FS_ID:52175 DS_ID:16391 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM



View of flap gate on WS.

LM Start	22.16	Rating **	С	Issue No.		8	
LM End	22.16	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			39.3597	07°	39.359707°	
item				-121.8725	55 °	-121.872555 °	
DWR ID	DWR_MA0013_02_s _ 2012_8						
Comment Code							

PR : Prunings

Inspector Comment

The debris and prunings were removed from the landside slope and toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Sutter Maintenance Yard Maintenance Area 0013

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	10/31/2018 10/31/2018	Bob Duffey

LM Start	22.33	Rating **	A/W	Issue No.		62	
LM End	22.33	Issue Type +	Ма	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Stability			39.358419°		39.358419°	
пеш				-121.875088°		-121.875088 °	
DWR ID	D DWR_MA0013_02_s _ 2016_62						
Comment Code							
S1 : Repair slope instability.							
Inspector Comment							

Photo 1 of 1: FA_2018_MA0013_301_62_20180905_00014.jpg



View of slope instability issue along the landside slope.

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement